INTERNATIONAL FINANCE AND ITS REORGANIZATION

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TO

A. BARTON HEPBURN

AND

PAUL M. WARBURG

BANKERS

WHO HAVE MAINTAINED

TRADITIONS OF SCHOLARSHIP AND PUBLIC SERVICE;

PIONEERS IN CURRENCY REFORM

AND

IN THE DEVELOPMENT OF THE BANKING SYSTEM

TO SERVE AMERICA

IN HER NEW INTERNATIONAL POSITION

PREFACE

If Hegel's dictum, "we learn from history that we learn nothing from history" is true, it is because mankind failed to view history objectively and hitherto regarded itself as the material of a blind evolution rather than as the director of the social processes. Nations responded unconsciously to the forces of the day and uncritically expressed the emotions that dominate group behavior. The dissemination of the scientific attitude, the observation of the events of history as laboratory variants, may help the world to learn from experience and to avoid the repetition of much misery and suffering.

The World War may be conceived as a vast experiment in international finance, conducted at the cost of over 12 million lives and over 200 billion dollars. Its lessons should be an open book for the generations to come. England, France and Germany utilized three different methods in financing the war. The consequences in each of these countries are a foil to the conflicting theories of war finance, advanced during the struggle. The results test the hypotheses.

A knowledge of the history and diagnosis of the financial ills of Europe are essential to the determination of the prognosis and the therapy. The present chaos in Europe can be understood only in the light of its causes, and the possible way out is to be found only by studying the effects of war-time finance.

The aim of this book is to present a concise account of the financial changes in Europe during and since the war, and a summary of the proposals for financial reconstruction. It covers the period from 1914 to 1921 and treats the questions of foreign exchange, banking and public finance with reference to the three

major belligerents. The methods of war finance are compared and appraised, and an attempt is made to outline the prospect, and the measures taken or recommended to hasten the return of stable conditions. The ending of the war has made it possible to discuss scientifically and assess impartially questions on which war loyalties warped the judgment.

Countries other than Great Britain, France and Germany are considered only incidentally. Except in the discussion of exchange rates in the United States, our own country is not included, chiefly because most American readers are more or less familiar with the methods and effects of its financing of the war and because the United States has not been as seriously affected as the European belligerents, and the burden of its debt is not impossible to bear. Our after-war financial problem involves not a doubt as to the possibility of a solution, but rather a choice of procedures.

It is hoped that the book will be of value to those interested in public and private finance, either as students or as business men. The volume is the last of the series of studies on the economic effects of the war, written by the author as a result of a conversation in November, 1917, with Mr. John Macrae. It was written during seven months of retirement and after a considerably longer period of gathering of material.

Grateful acknowledgment is made of obligation to Professors H. C. Adams of the University of Michigan, T. S. Adams of Yale University, and E. L. Bogart of the University of Illinois, to whom the writer submitted an analytical outline of the collected material in the summer of 1920 in Washington and who urged him to write the book. Thanks for comment and valuable suggestions concerning the manuscript are due to Professors E. R. A. Seligman and E. L. Bogart, and to Mr. L. R. Gottlieb, in the section on public finance; to Professors H. Parker Willis and Harold G. Moulton, in the section on banking, to Mr. Fred I. Kent, vice-president of the Bankers Trust Company and during the war Director of the Division of Foreign Exchange of the Federal Reserve Board, and to Dr. Raleigh S. Rife, economist of the Guaranty Trust Company in the section on foreign exchange, and to my colleague Professor Charles W. Gerstenberg of New York University for general suggestions. The chapters dealing with each of the three countries were submitted for criticism to

representatives of these governments, then in the United States, Mr. John Joyce Broderick, and Mr. H. C. A. Carpenter, respectively Commercial Counsellor and Commercial Secretary of the British Embassy at Washington; Mr. J. A. M. DeSanchez, Director of the Division of Economics of the French Commission in the United States, and Mr. Ludwig Bendix, Chief of the Division of Foreign Exchange of the German Ministry of Economics. However, the views expressed are the author's alone. The author is indebted to Undersecretary of the Treasury, S. P. Gilbert, Jr.; Ex-Assistant Secretary N. Kelley; Mr. John Foster Dulles, sometime legal adviser to the American Commission to Negotiate Peace; Mr. Carl Snyder, Statistician of the Federal Reserve Bank of New York; Dr. C. E. McGuire of the Inter-American High Commission; Dr. Arthur N. Young of the State Department; to Mr. Malcolm C. Rorty of the American Telegraph and Telephone Company who kindly read portions of the material, and to Mr. C. C. Latour of the American International Corporation, who was good enough to read the galley proof. However, none are to be held accountable for the statements of fact or opinion in the book.

For the use of the illustrations, the author is indebted to Professor Wesley C. Mitchell's "International Price Comparisons," (for Figures I, II and III), and to the editors of the Harvard Review of Economic Statistics, (for Figures VI, VII, IX and XI), of the Monthly Review of the Federal Reserve Bank of New York (for Figures IV, XXI and XXII), of the Federal Reserve Bulletin, (for Figures V, VIII, X, XII, XIV, XVI and XVII), and to the Secretary of the War Finance Corporation, (for Figures XIII, XV, XVIII, XIX and XX). For coöperation in the collection of material, acknowledgment is made of the aid of Mr. Wesley Frost, sometime Acting Foreign Trade Adviser in the Department of State and Mr. M. L. Jacobson, Statistician of the Federal Reserve Board, former colleagues of the author on the Economic Liaison Committee of the Federal Government Departments, and of the aid of Dr. Henry J. Harris of the Division of Documents of the Library of Congress, and of the staffs of the library of the Federal Reserve Board at Washington, of the Guaranty Trust Company, of New York University, and of the Division of Economics, Statistics and Public Documents of the New

York Public Library. Not least are sincere thanks due to a few friends, who subscribed to advance copies to the number required by the publishers.

E. M. F.

14 Wall Street,
October 25, 1921.

NOTE: *Where dollar equivalents of foreign currencies are given, the conversion is at mint parity, unless otherwise specified. The footnotes refer to collateral readings as well as to sources of data in the text.*

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POSTSCRIPT

Before the war, the world functioned as an economic unit, as a single organism. During the war, it was fractured, economically. Both groups of belligerents and the overseas neutrals constituted three practically separate economic systems. At the same time, debts were greatly increased and paper money was printed in huge volume. Since the war, the return of prewar conditions of economic interdependence and of stable currencies has been obstructed by the terms of the peace. And therefore the world suffers.

Upon what sort of world did the Great War break? Essentially it was a mobile world, an organic world. The world in 1914, as distinguished from previous periods of great wars, was highly interdependent. Transportation and communication on land, over and under the sea and in the air, by steam power, electricity and motor oil, knit together the uttermost ends of the earth. News was simultaneously published in distant lands. An insect pest, the wheat rust or the boll weevil, was no longer merely of local concern; on the contrary human beings in foreign parts were deprived of food and raiment.

Densely settled Europe became the workshop of the world. It exported finished goods to overseas regions, and imported food and raw materials. The competition of manufacturing countries led to the search for new markets and for new sources of supply of raw materials. And out of this seeking resulted the colonial expansion of the European powers, the building of new railroads, the investment of foreign capital to open up the world's wildernesses, which were to furnish both more raw materials and more markets.

Trade was fairly unrestricted. The little nations, Switzerland, Holland and Belgium, did an extensive transshipment trade for the great powers. The great manufacturing nations were each

other's important customers. The exploitation of raw materials was not nationalized. Great Britain controlled the world's supply of oil-seeds but a small German city, Harburg, was the center of the oil-seed crushing industry. The United States was the leading source of cotton and of copper, but England and Germany were the chief makers of textile and electrical goods for domestic and foreign markets. Germany, as a result of her system of education, developed those industries which required a wide diffusion of scientific knowledge, and which held the key to the economic life of the nations, such as the manufacture of drugs, dyes, optical goods and electrical machinery. The world had become dependent on Germany for many of its "key industry" products.

Before the Great War, the world had become unified, interdependent, organic, sensitive. Therefore, men were encouraged to dream of universal peace, and therefore, also, had war become so costly, both in money and in sacrifice. In fact, Achille Loria, the Italian economist, pointed out that the greater cost of modern war promises to widen the "zone of arbitration"; when nations risk in war more than they are likely to gain as a result of it, peaceful settlement becomes profitable.

Then came the great catastrophe. Economically, it revealed to the world the essential dependence of each people upon all others. The harmonious functioning of modern industrial society was possible only within narrow limits and under conditions of peace. The suffering during war time resulted from an attempt at self-sufficiency, enforced upon the nations, belligerent and neutral. An international-mindedness has grown out of the war. Not only the London merchant, but also the tin miner of the Straits Settlements, the coffee laborer of the Brazilian plantations, the toiler in the Congo rubber fields, and the Afghan tribesman, had been economically knit to overseas communities before the war. The great cataclysm shook them profoundly, and left them more conscious than before of their dependence on other human beings in distant lands. The war in Europe incited mobs to rice riots in Japan, and to race riots in our own East St. Louis. It raised the cost of living in China and caused strikes in Argentina. To predicate isolation of any country, even of the United States, is an exhibition of infantile and wishful thinking,—the desire to escape from the responsibilities of reality.

The belligerent nations sought to increase their supplies for

war purposes. But they did not realize adequately the nature of the industrial readjustment demanded by war, the need for the repression of luxury consumption and of non-essential production, nor did they frame a fiscal policy that would obtain this result. Excepting Great Britain, which relied heavily on taxation, the European powers financed the war chiefly by means of loans and paper money, put the burden during the war upon the weakest shoulders in the community, and embarrassed the finances of the postwar period. The war has made the masses conscious of the vital bearing on their lives of their government's policies in finance, matters generally regarded of recondite nature and remote interest. The vanishing of lifelong savings, stolen by the state through inflation of the currency, the tantalizing rise in the cost of living of the poor, and the under-nourishment of their children has made the public appreciate the significance of public finance to private welfare, and the costliness of invisible taxation. The pursuit of seemingly painless policies in finance are now ending in the perplexities if not the despair of ministers of finance, and in the trials if not the tragedies of millions of human beings.

The postwar difficulties arise from the effects of the war, and of the terms of the peace. The financing of the war by loans and paper money resulted in huge debts, inflated note issues, depreciated currencies, gold embargoes and unstable exchange rates. These largely inevitable postwar conditions repressed production and hampered international trade, but in addition the terms of peace played havoc with the prewar economic organization of Europe. As if the war had not bequeathed a sufficient heritage of woe, the peace conferees bestowed upon Europe new difficulties of their own creation. Like the Bolshevists who think that the economic life of a nation will function under all conditions, just because it happened to function under certain known conditions, the peace makers at Paris took for granted that Europe would thrive because of many restrictions, just because it flourished in spite of a few of them before the war.

It is unnecessary to recite in detail the much criticized and now well-known errors of the diplomats at Paris. Map making, rather than healing of the economic wounds of Europe, was their main concern. They drew boundary lines instead of reviving industries. The British statesmen did not maintain the same dispassionate attitude toward Germany in 1919 that their predecessors

did toward France in 1815. No Allied statesman in 1919 had the vision to foresee the chaos that now grips a disintegrated Europe, and none had the courage to face the mob spirit, rife after the armistice. The European diplomats were the victims of the propaganda which they had engendered and supinely they fed the hate and passion which they had aroused. None uttered words, such as Castlereagh wrote to Wellington in 1815. "There is not a power that borders on France, from the Channel to the Mediterranean, that is not pushing some acquisition under the plea of security and rectification of frontier. They are foolish enough to suppose that the Great Powers are to be in readiness to protect them in the enjoyment of these petty spoils."

Professing the ideal of self-determination, but practising the *ruse de guerre* of debilitating the enemy powers, the Allied diplomats cut up Central Europe. The existing systems of transportation were rendered ineffective by the new boundaries, and the newly created states must therefore dissipate their energy, constructing new railroads for a new industrial society, establishing new mints, new banks of issue, new post offices, new bureaucracies, and new overhead charges for new states. New tariffs and new restrictions on trade were enacted. The economy of large units had been applied in industry during the war, but was ignored in statemaking at the peace table. In the words of Brailsford's "After the Peace," "The treaty worked against life, against creation, against production. It crushed the most productive people, forgetting that production carried to the utmost level attained in Central Europe can be the effort only of generations of education, science and organization. It showered its favors on Poles, Rumanians and Jugoslavs, primitive, unschooled races, not indeed without their own charm and emotional genius, who never, even after generations of experience, are likely to replace the Germans as industrial or intellectual workers."

To cap the climax, and in spite of the dictates of prudence and of their plighted word at the armistice not to include pensions and allowances, the Allies levied an indemnity on the defeated powers, which, because of its amount, has completed the task of disorganizing the prewar economic system of Central Europe. In the words of one of the legal counsel of the American peace delegation, they worked on the theory that "a hurricane from the west might repair the damage wrought by a hurricane from the east."

Then, like Goethe's *Zauberlehrling*, who conjured up the spirits but could not lay them, the Supreme Economic Council, in its statement of March 8, 1920, essayed to find a magic formula that might undo the mischief wrought by the fatal words of the treaty. After having sown the seeds of another war in Europe, the Supreme Economic Council exhorted the new states to cease fighting. After pulverizing the Central European *bloc,* the Council urged the constituent parts to form a new economic unit. After letting loose the nationalist passions, the Council vainly pleaded to restrain their expression.

What of the outlook? Financially, the governments of Europe present an array of pathological cases, from Russia, Poland, Austria, and recently Germany, whose currencies are almost worthless, on the one hand, to Italy, France, and Belgium and so on up to England, whose exchange rate is depreciated relatively least among the great powers of Europe. The entire gamut of financial disorders is here presented. The currency of the first group of countries will never return to gold parity, that of England most likely will, barring unforeseen contingencies. Whether the paper money of the members of the intermediate group will again equal gold parity is an open question. If they deflate their currencies, the burden of the debt charges may bankrupt them. There were budget deficits in three-quarters of the countries represented at the International Financial Conference at Brussels in 1920 and in eleven-twelfths of the countries of Europe, and there is little likelihood of an improvement in the near future. Twenty per cent on the average, and in some cases much more of the budget expenses of the powers represented at the Brussels conference, were devoted to armament and military operations. Militarism has become a luxury that present-day Europe cannot afford. From the point of view of the continued existence of the European states, and of the survival of their inhabitants, fighting is a non-essential industry. The price of imperialism has exceeded the capacity of the peoples to pay for it.

The treaty may be unjust in its principles, and unsound in its prescriptions, yet the solution of the difficulties in Europe lies not in another military conflict. Civilization dare not soon again be fluxed in the crucible of war. The slower processes of international adjustment by negotiation seem the alternative means to attain stability in Europe. Time is the ally of truth. A growing

international public opinion will not long brook injustice, be it in Korea or Colombia, in Shantung or Silesia. And to this deliberative process of modifying the recent treaties, and of readjusting international relations, America can not be indifferent.

America is deeply concerned in the remedies to be applied. She is tied to Europe by innumerable bonds, political nerves, and economic arteries, and the paralysis of the peoples in Europe is reflected in the unhealthy condition of the United States. The symptoms of disorder in our own country are traceable to the focus of infection in Europe. That the world is a living, organic unit is painfully brought home to the nation which, according to some of its spokesmen, pretended to live in isolation.

In some of the steps to be taken to insure the recovery of the nations of Europe, foreign influences avail little. These nations must, themselves alone, grapple with many problems: deflation, balancing of the budget, stabilization of note issues and of the purchasing power of paper monies; ultimately perhaps a revaluation of the currency and the free movement of gold; the funding of floating debts; the conversion of existing debts into issues bearing a lower rate of interest; in some countries a capital levy; in others a forced loan, and perhaps in a few, bankruptcy and a clean slate—these financial travails must be borne by each nation for itself.

Only in measures of international concern can America lend any aid. She can encourage international loans by joining, in the definition of her own claims against the Allies, and in the determination of questions of security and priority of new private loans. She can put the credit facilities of New York at the disposal of borrowers whom London alone can no longer accommodate. She can advocate the further moderation of the terms of the treaty, a policy hitherto pressed chiefly by Great Britain alone. America can exert her influence to eliminate trade restrictions, and to strengthen those forces making for economic unity and the harmonious functioning of the nations of Europe. But no *ipse dixit* of any single power will produce an adequate result. Alone, America may preach and pray, but she can neither direct nor govern in international affairs. Her vast interests within her own boundaries and her relatively sparse population have prevented the development of a decisive interest and effective public opinion in international problems, or of a personnel trained in foreign

affairs. The assets of America in the council of the nations are an economic disinterestedness and the capacity for a moral enthusiasm, such as its people evinced during the war. Unexpressed, her disinterestedness must degenerate into indifference, and her generous coöperation in wartime cool to cynical apathy. Within an organization of the nations, her attributes may be effective in the redemption of Europe. Without membership in an international body, America's efforts have been halting and half-hearted, and her potentialities for service to the world and not less to herself may eventually wane.

In the reorganization of international finance, America can function more worthily and effectively in conjunction with the other powers, both those in distress and those capable of aiding. The promotion by the United States of closer international bonds does not imply the assumption of other nations' burdens. The exercise of the influence of the United States in international affairs does not involve a guaranty to foreign countries against the losses resulting from unsound fiscal policies, or a willingness to underwrite the inept war financing of certain of the European powers, or a readiness to make good out of its resources the industrial losses to Europe resulting from unworkable reparations terms.

This generation of Americans has a plain obligation to the world, and to itself. History will judge our heads and our hearts, our sagacity and our altruism by our present foreign policy.

INTERNATIONAL FINANCE AND ITS REORGANIZATION

SECTION A

THE EFFECTS OF THE WAR

INTERNATIONAL FINANCE AND ITS REORGANIZATION

Part One

PUBLIC DEBT AND TAXATION

CHAPTER I

PRINCIPLES AND PRACTICE IN THE WORLD WAR[1]

A. The Theory of War Finance

A mediaeval method of financing war was by means of a fund accumulated as a measure of preparation. A militaristic method of financing war was the seizure of booty, levying upon the invaded territory, and the imposition of indemnities. In modern times nations have financed military operations by means of paper money. More recently the chief reliance has been upon loans. The democratic way of financing a war is to impose heavy taxes and to raise the balance of necessary revenue by loans.

In times of peace the social surplus is the difference between the goods consumed in maintaining life and the goods produced in industry. Theoretically, the entire social surplus may be appropriated temporarily for the public need by taxation. The objective costs of war are goods and services, devoted to the conduct of mili-

[1] Patten, Simon N., Mandeville in the Twentieth Century. American Economic Review, March, 1918.
Kemmerer, E. W., Inflation. American Economic Review, June, 1918.
Seligman, E. R. A., Who is the Twentieth Century Mandeville, *Ibid.*
Plehn, Carl C., Substance and Shadow in War Finance, *Idem.*, Sept., 1918.
Davenport, H. J., The War Tax Paradox, *Idem.*, March, 1919.
Papers by Adams, T. S.; Hollander, Jacob H.; Patten, Simon N.; Seligman, E. R. A.; Sprague, O. M. W.; and others. The Annals of the American Academy of Political and Social Science, January, 1918.
Sprague, O. M. W., The Conscription of Income. Economic Journal, March, 1917.

tary operations. The subjective costs of war are burdens and sacrifices made by the community in effecting a transition from peace to war. The burden of war falls on the fighting generation, for it must reduce its consumption by an amount equal to the increased military consumption and the capital invested in war plants and facilities. The demand of the fighting generation on the current national income must be reduced by deferring satisfactions or by lowering the standard of living.

The contribution of goods for the conduct of war must come out of current production. The past can contribute but little, for fixed assets and capital goods cannot be consumed, except to a slight extent. But the future contributes nothing at all, for goods to be produced after the war cannot be used during the war. Furthermore, a fighting nation may increase its consumption, if another nation is willing to lend its current surplus of production. The goods are provided during the war. "The future does not provide for the war; future producers merely indemnify present providers. The lending nation or persons who bear the burden during the war may be indemnified later at the cost of other people."

The real cost of the war can be met only by a reduction in consumption. A country with an annual surplus of $1,000,000,000 cannot spend $5,000,000,000, unless it borrows abroad or inflates its currency. No nation can spend more than it can produce and borrow. And the advocates of light taxation and large loans stultify themselves, when they point out the discrepancy between the amounts to be raised by loans and the amounts available from taxation. Curtailment of consumption may be effected in three ways. Taxation involves a compulsory decrease in consumption.

Withers, Hartley, Our Money and the State, p. 29.
Pigou, A. C., The Economy and Finance of the War, 1916, p. 70.
Joint Conference of the Western Economic Society and the City Club of Chicago, June 21, 22, 1917. Financial Mobilization for War.
Proceedings of the Twenty-ninth Annual Meeting of the American Economic Association, December, 1916.
Scott, W. R., The Adjustment of War Expenditure between Taxes and Loans. Glasgow, 1917.
Edgeworth, F. Y., Currency and Finance in Time of War. Oxford, 1917.
Arbuthnot, C. C., Paying the Cost of the War. The Scientific Monthly, vol. vii: 413-434.
Laughlin, J. Laurence, Credit of the Nations. Scribners, 1919, Chap. II, War and Credit.

Appeals to buy bonds lead to voluntary curtailment of consumption. And finally, inflating the currency reduces purchasing power and by stealth deprives the masses of the ability to buy. Taxation means relatively low net money wages and relatively stable prices. Inflation means an increase of money wages but a decrease in real wages because of a relatively greater rise in commodity prices. In any event, the consumption of the masses is restricted, so that the non-producers and fighters may be maintained. To increase the margin between consumption and production there must be either a lower money income per capita or less purchasing power in the unit of money.

i. *Goods versus Credit*

An adequate comprehension of war financing requires that symbols and tokens of value, such as money, currency, and credit be left out of consideration and that the underlying production, consumption, and surplus of economic goods be studied.

In times of peace the consumption of goods is limited by production and distribution. There is always the underfed group at the margin of society. In times of war the production and distribution of goods are conditioned by war requirements or consumption. Plants are built to meet needs.[2]

The increased consumption of goods in time of war is not so great as it seems, for the increase in public consumption is balanced by the restriction of private consumption. A mobilized army consumes to a large extent much the same quantity of food and clothing as its members consume in times of peace, and the increased consumption of strictly military goods is made possible by the restriction on the production of goods not essential to the conduct of the war.

The emphasis on the concept of goods rather than of money helps to clarify thinking. The need for the economic readjustment incident to the beginning and the ending of a war becomes evident. Furthermore, it becomes clear that the generation that conducts the war must pay the whole cost of the war, and that the burden cannot be shifted to the next generation.[3]

[2] Adams, H. C., Public Debts. D. Appleton & Co., 1887. Chapter on Financial Management of the War. Pp. 105–142.

[3] Report of Committee on the Purchasing Power of Money. American Economic Review, vol. IX, No. 1, supplement, p. 365.

"For each generation must subsist upon the products of its own industry. No father can eat the potatoes to be hoed by an unborn son, nor can an army live on bread to be delivered between ten and forty years from the date of the contract." [4]

Furthermore, this distinction between goods and credit makes it possible to distinguish between the actual war losses and the so-called war costs. The war losses are in goods and the war costs are expressed in terms of money. Losses include goods that were destroyed. Costs include (1) a national debt which has become the private assets of the nation's citizens, (2) paper currency, which was issued to buy goods, and (3) taxes, which represent a part of the private surplus surrendered to make possible an increase of public consumption.[5]

It is evident then that goods are primary and that credit and money, which are merely measures of goods, are secondary. Although goods are consumed or destroyed, the money paid for them remains. It is not liquidated. The lender furnishes present goods and the borrower promises to repay future goods. The wastes of war consist of the destruction of surplus goods. To make the surplus as large as possible, consumption of non-essential goods is curtailed so that the production of essential goods may be increased. But at bottom the waste resulting from war is the same as the waste resulting from extravagance in times of peace. Both are alike in that they result in the depletion of the economic surplus. The failure to satisfy the demand for luxuries is a phase of the diverting and deferring of human satisfactions in order to promote the war aims or to meet the pressing social need.

Credit, however, depends upon goods. The ability to borrow depends on the productive power of a nation, present or prospective. Banknotes and paper money do not increase a nation's wealth. Furthermore, great debts do not end a war. As the surplus of production over consumption is reduced, a nation is weakened. When the surplus above the necessities is wiped out, the war must cease. National exhaustion is reached not when the debt reaches a certain limit (as Karl Helfferich thought would be the case when Germany's debt reached mk. 100,000,000,000), but when the margin of production over consumption becomes a minus quantity. This

[4] Adams, H. C., *Ibid.*

[5] Jaffe, Edgar, Kriegskosten und Volksvermoegen. Europaeische Staats-und-Wirtschafts Zeitung, December 15, 1917.

margin is fixed not alone by the increase in production of essential goods, but by decrease in the consumption. This second factor particularly is elastic. In 1915 the Germans raised the cry that the nation was being starved, and yet for three years longer they conducted a war which exhausted their European opponents and which was finally decided only when the latter obtained unconditional access to the supply of goods made available in the United States. This restriction of consumption of goods in Germany Helfferich termed "the moral reserves" of the German people.

ii. *Inflation*

(a) *Causes of Inflation*—

In normal times the banking practice of most countries imposed a limit on the volume of notes and deposits with respect to the gold reserve of the state bank. As a result of war, this limit was suspended. The banks lend to the government, which receives a deposit credit, and against it payments are made to the war industries, whose deposits in turn are increased. The inflation finally filters throughout the community. In time of war the government has enormous purchasing power. It needs goods and bids up prices. There is little difference whether the increased purchasing power of the government takes the form of deposit credit or paper money. To the extent that loans come not from savings of the investor, but from his borrowings at the banks or from subscription by banks, inflation is caused. The increase in deposits causes an increased demand for small currency and paper money to transact business. This currency is usually inconvertible so that while there is no danger of a run on a bank, there is also absent the wholesome check upon the excessive issue of paper. In brief, the rise of prices during a war is caused by the large and pressing demands of the government and an increased supply of credit or currency.

(b) *The Nature of Inflation*—

Inflation results from a lowering of the ratio of the volume of goods to the volume of money. If the volume of money in circulation increases more rapidly than the volume of goods produced, prices will rise. This is an historic process. Professor Thorold Rogers in his "History of Agriculture and Prices in

England" shows that in the thirteenth century an ox was worth about 10s., a sheep 1s. 6d., and a quarter of wheat 5s. 6d., and the wage of a laborer was about 5d. to 6d. per day. About the year 1500, an ox cost 22s. 6d., a sheep 2s. 4d., a quarter of wheat 5s. 6d., and the wage of a laborer about 5d. to 6d. per day. Average decennial prices of oxen from the thirteenth to the seventeenth century are given herewith:[6]

Period	Average price of oxen
	s. d.
1261–1270	10 3
1331–1340	12 9¾
1391–1400	14 9¾
1461–1470	20 7½
1521–1530	30 10⅓
1571–1580	85 10½
1633–1642	189 8
1693–1702	166 8

When the increase in the volume of gold or of credit or in the circulation of money outruns the increase in production of goods, prices rise.

(c) *The Results and Evils of Inflation*—

Inflation results in a rise in prices or a decline in real wages. As a result of competition between employers, money wages tend to rise after prices, but they lag behind. The lag of wages and of other costs of production behind prices makes profiteering possible. When profits are made at the expense of wages it means that the laborer bears the brunt of the war and the profiteer fixes his gains by investing them in war loans. The laborer's invisible contribution to the war consists in the amount by which wages lag behind prices. The burden of the war, therefore, falls upon a class least able to bear it. Income is shifted from the thrifty wage earner to the spendthrift profiteer. Inflation is an unrecognized form of taxation, which falls upon those with fixed incomes from labor or investments. Inflation constitutes an income tax on the salaried class and a capital tax on the bond owner.

[6] Rogers, J. E., Thorold, History of Agriculture and Prices in England, Clarendon Press, 1866–1902, vol. I, p. 361, vol. IV, p. 355, vol. V, p. 354.

Another evil of inflation consists in the fact that the government receives money of a low purchasing power during the war and later retires its bonds with money of a high purchasing power, although as an offset the government is usually able to refund at a lower rate of interest. Since the postwar taxes do not fall on the holders of government bonds pro rata, the war profiteers are favored. Again, the increase in deposits and in banking transactions creates a false optimism, which operates against economy in the use of funds. Finally, inflation frequently results in a departure from the gold standard, a dislocation of international trade, depreciation of the exchanges abroad and a discount on paper money at home, and a difficulty in contracting foreign loans.

However, inflation does play a useful part in several ways. Primarily, it results in a rise of prices which stimulates industry. Financially it has the value of a bundle of hay tied in front of a donkey's nose. The tremendous increase in production in the belligerent countries during the war was partly the result of wartime inflation. On the other hand this benefit is limited to the early stages of the war, until the maximum of productive capacity is developed. Inflation is indiscriminate in it effects, and the nonessential industries as well as the war industries are stimulated. Finally, inflation compels economy and a reduction in the consumption of luxuries, thus releasing labor and capital for the production of essential goods. However, this end may be attained more directly by taxation, by rationing raw material, or by establishing priority in shipment or in financing.

iii. *The Burden of the Present or the Future Generation*

Though it is true that the war-waging generation must provide the goods, the burden falls upon the individuals of future generations to the extent that the taxpaying and the bondholding groups are not identical and that the expense of collection of taxes bears on these later generations. While the country as a whole is neither richer nor poorer, after it has returned as bond interest the taxes which it has collected for this purpose, there is a transfer of wealth from one group in the community to another because the proportion of taxes paid by the various classes of income-taxpayers does not correspond with the proportion of war-loan interest received by them. The individual who was enriched as a result of the war

and who may have bought war loans is benefited in the after-war period. On the other hand, the individual or corporation which is developing a profitable business in the after-war period bears the burden. Taxes to pay interest on war loans hamper production and repress industry after the war. In other words, the greater the reliance upon loans for financing a war, the greater the likelihood of shifting wealth among the individuals of later generations, often unjustly and often to the detriment of the industrial development of the country.

To the extent that the war is financed by taxes, the burden is borne by the generation that fights. The accounts of future generations remain unaffected except to the extent that overwork or undernourishment may impair the post-war productivity of the war-waging generation and the vitality of succeeding generations. The financing of war by loans tends to fix the riches of the class that profited most through the war, and to transfer the tax burden to the less fortunate individuals of succeeding generations. On the other hand, the financing of war through taxation confines the burden to the war-waging generation. Again, severe taxes during war are temporary in their nature and do not repress production as much as prolonged heavy taxation in the after-war period. In brief, financing a war by taxation leaves less of a burden upon the individuals of later generations than does financing by loans.[7]

iv. *Taxes vs. Loans*

In considering the alternative of taxes or loans, there are other aspects than the burden on the individuals of the war-waging or subsequent generations. The question as to whether a war should be financed entirely by loans, entirely by taxes, or by a combination of both of these methods has been repeatedly discussed by economists and treasury officials in recent times.

Taxes involve compulsory saving, but loans voluntary saving. A forced loan also compels saving, but is less likely to lead to evasion than taxes. "Taxes and bonds, so far as they are paid by income receivers out of income receipts, are merely different ways of getting the paying done, so that war activities and war consumption may displace civil activities and civil consumption,

[7] Pigou, A. C., The Burden of War on Future Generations, Quarterly Journal of Economics, Feb., 1919, vol. 33, pp. 242–255.

and not at all a way of deciding whether the paying shall be done now. With taxes, the contributions are collected, the tale is told, the books closed. The loan method provides that tax payments shall be postponed, not that payment be postponed; that future taxpayers shall indemnify the lenders for their present advances; not that the future shall provide the ships, the coal, the shells, the clothing, the cannon, the food, but that the present furnishers shall in the future be reimbursed through taxes for what they have now advanced. The taxpayer of the future time will merely return to the present contributors (with the addition of interest, it is true) what present taxation would have compelled them to pay now. Taxes are merely postponed and somewhat increased. But the present does not get rid of the burden. The present taxpayer gets rid of it now, only in the sense that the present bond buyer temporarily assumes it. The bond method means merely present sacrifices out of present incomes in support of the present war on terms of a promised later indemnity out of taxes later to be collected. The tax method means contributions without a promised indemnity."[8]

(a) *Loans*—

It may appear that the alternative of loans or taxes really does not exist; that all funds ultimately come from revenue and that therefore the liquidation of loans involves taxation ultimately. But the fact is that the severity of taxation during a war is a determining element, for the liquidation of war loans may be brought about by much lighter taxation spread over a period of years. Furthermore, it has been held that production during a war should not be repressed by heavy taxation. Again, since war is an extraordinary expenditure, it is held to be unwise to attempt to make the ordinary revenue cover it. Finally, no scheme of taxation can be just to all the members of a community. A mild levy may be inequitable but tolerable; a very heavy tax may not only work an intolerable injustice, but it may even prevent its own operation. On the other hand, loans undoubtedly lead to inflation. For to the extent that there is a liquid surplus, it may be taken by taxes; therefore loans must be raised, in large part at least, by borrowing at the banks, and thus they inevitably lead to inflation.

[8] Davenport, H. J., *ibid.*

1. THE ARGUMENT FOR BONDS—Because loans lead to inflation and raise prices, production is increased during the war and therefore there is a larger surplus of production over consumption available for the emergency. Taxes have no such effect. Furthermore, loans at the beginning of a war are necessary in order to give the tax payer time to adjust himself to new burdens and to give the war plants ample funds for prompt expansion.

No one now advocates the financing of a war entirely by loans. The use of credit in part is defensible, if post-war taxation to pay interest and principal does not throw the burden upon the poor, those that could not buy war bonds.

There have been, however, faulty arguments in favor of the use of war loans. Some economists hold that regularly recurrent expenses should be met out of taxation, but that emergency or war needs may properly be met out of loans, provided they are repaid before another similar emergency is likely to arise. The fallacy of this argument consists in the fact that borrowings by a corporation or by an individual are different from the borrowing by an entire community of itself. The borrowing individual or corporation obtains the accumulated surplus of others. The same is true in the case of an external loan to a nation. But the state borrowing internally must rely upon the increase of its surplus of production over consumption.

Another faulty argument in favor of loans is that they do not cause greater inflation than taxes. The theory is that inflation is caused by the increased demands of the government, the dislocation of production and the increase in private credit and in the currency. However, this conclusion takes no account of the fact that the increased supply of currency is in part the result of the loan policy. The Bank of France issued notes against government securities. The Bank of England increased its "public deposits" and ultimately "other deposits" against government advances. In the United States and in the other belligerent countries, the holders of war paper were given preference in making loans at the banks, and thereby deposits, merely another form of money, were increased. For a government bond is good collateral at the bank, but a tax receipt is not. While it is true that taxpayers have to borrow at the bank to meet their assessments, yet such borrowings are necessarily both brief and self-liquidating, but borrowings on war paper are neither. Furthermore, if tax installments were broken up into

smaller fractions, the need for borrowing could be obviated. Great Britain, for example, permitted the artisan to pay his taxes in weekly installments.

2. THE ARGUMENT AGAINST BONDS—The chief argument against bonds as a means of financing a war is the growth of inflation. If the public bought the entire loan inflation would not follow, but it is because the banks must carry a large part of the bonds for the subscribers and for themselves that the disadvantages of the loan method come about. Loans lead to an increase in government expenditure without correspondingly curtailing private expenditure, as taxes do. Prices must therefore rise. Whereas taxes may cause some inflation, it is incomparable in extent to the inflation caused by the loan policy. "Bonding induces people to think they can grow rich on the unproductive expenditures of the state. Consumption is expanded when it should be contracted. A shortage of goods follows and then come high prices, which make people believe they are more prosperous instead of less so. Taxation if wisely laid would bring order out of chaos and not only exempt future generations from the burdens of war but also lighten those of the present. In essence, the burden of the war is the excess of national expenditures over national surplus. To this amount the consumption of the people must be reduced. If expenditures are seven billion dollars, consumption should be reduced by this amount and the saving turned over to the government. The account is thus squared in each year and the war is paid for but once. . . . Advocates of the loan policy think it suicidal to take seven billions directly and yet the policy adopted takes double the amount from the people's pockets. . . . This shows that the people are paying two dollars in increased prices for every dollar the government benefits by loans. The high prices make profits and the government borrows the net gains of the profiteer to carry on the war. Forced saving by this process turns over a part of the people's daily consumption to the recipients of high prices. What the people save is thus given to a privileged class and they loan it to the government. . . . This is the essence of carrying on the war by means of loans. The people pay for the war by their reduced consumption, the benefit of which goes to the profiteer. . . . War loans are war profits. . . . If the high prices were occasioned by an increase of paper money, the advocates of it would have to

blush for their logic, but when the same inflation is produced by a bond issue a quibble is possible which permits a flood of new argumentation over a point long ago settled.

"The people suffer from inflation and thus pay for the war; they will suffer and pay again when the bonds are redeemed. And there will come the greatest suffering of all in the financial crises which bring inflated values back to a normal basis. Three payments and perhaps more are what this financial method imposes. . . . We spend money but instead of recognizing it we cover it up by calling our liabilities assets. To tax the nation ten billions does not differ in its ultimate effects on wealth from a bond issue to a like amount. In either case we are ten billions poorer. In one case we see it and adjust our expenses accordingly, in the other we rush on into new extravagances. A risk is run for which there is no compensation." [9]

"Under the tax method the rich and moderately rich really shoulder the whole burden of the charge that is laid upon them. Under the loan method they do not do this, because they are compensated afterwards through taxes laid for that purpose, partly on themselves, but partly on other and poorer sections of the community." [10]

"Prophetic foreboding that labor, having paid once for the war, must now pay a second time to those lending for the war, is in the fatal way of fulfilment. The bonds that had been purchased out of the margins contributed by labor become a valid obligation against the laborer as taxpayer." [11]

Such are the views of the advocates of financing a war entirely by taxation.

3. Effects of loan policy in War of 1812—During the World War the policy of relying on loans has had very unfavorable after-war effects in Italy, Germany and France. Indeed, few wars of history have been financed exclusively by loans. In American history an excellent illustration of the failure of the loan policy may be found in the financing of the War of 1812. In his report for the years 1808 and 1809, and in subsequent papers, Secretary Gallatin gave it as his policy that "no internal

[9] Patten, S. N., *ibid.*
[10] Pigou, A. C., *ibid.*
[11] Davenport, H. J., *ibid.*

taxes either direct or indirect are contemplated. . . . Loans reimbursable after the return of peace, must constitute the principal resources for defraying the extraordinary expenses of the war. . . . So long as the public credit is preserved and a sufficient revenue is provided, no doubts are entertained of the possibility of procuring, on loan, the sums wanted to defray the extraordinary expenses of a war. . . . In proportion as the ability to borrow is diminished, the necessity of resorting to taxation is increased." [12]

The results of the loan policy were well nigh disastrous. The amounts taken by the public declined as successive loans were put out and the cash realized grew ever smaller, part of the fourth loan being put out at from 65 per cent to 69 per cent of the par value. Furthermore, when the public would no longer take government bonds, treasury notes were put out in increasing amounts and these too were issued at ever lower prices or at decreasing yields. The failure of this policy became most evident when there was subscribed only about $750,000 of the balance of over $12,000,000 authorized by the Act of March 24, 1814.

The loan policy of Gallatin was opposed by the advocates of a limited taxation policy. The chairman of the Committee of Ways and Means, Mr. Bacon, foresaw at the very beginning of the war the inherent difficulties of the loan policy. He said, "If we yield to the new theory of borrowing both principal and interest, we have no data by which to judge upon what probable terms loans may be obtained at all, or how long it will be before we must wind up business." [13] The acting Secretary of the Treasury, Mr. Jones, advocated war taxes primarily to support the loan policy of the government, and said, "As reliance must be had upon a loan for the war expenses of the year 1814, the laying of the internal taxes may be considered, with a view to that object, as essentially necessary; in the first place to facilitate the obtaining of the loan; and secondly for procuring it on favorable terms." [14]

Finally, Gallatin's successor, Dallas, pointed out that "the plan of finance which was predicated upon the theory of defraying the extraordinary loan expenses of the war by successive loans, had

[12] Adams, H. C., Life of Gallatin, and other sources quoted in Public Debts, *ibid.*

[13] Annals of Congress. 12th Con., 1st sess., col. 1098, quoted by Adams, *ibid.*

[14] Annals of Congress. 12th Con., 2nd sess., col. 896.

already become inoperative, . . . owing to the inadequacy of our system of taxation to form a foundation of public credit."[15]

The financial record of the War of 1812 shows the weakness of the policy of raising money by loans exclusively. It resulted in a decline of the national credit, in a deficit in the last quarter of 1814, and in the abandonment of the policy in the midst of the war.

(b) *Taxation*—

1. THE ARGUMENT FOR TAXES—Several economists both in Great Britain and in the United States, advocated that the war should be financed mainly if not entirely from the proceeds of taxes. Taxes curtail the spending power of the community and therefore create less inflation. Furthermore, the curtailment by legislation of civilian demand and of luxury expenditures releases funds for taxation and simultaneously compels conversion of plants to war uses. While the total output during the war is greater than during peace, yet essential industries usually suffer for lack of labor and material because spending power is not sufficiently curtailed by taxes. Taxes hasten military preparation.

Heavy war taxes are a lighter burden than they seem because of the war psychology and of the devotion to the nation's interest. Wages and profits in many industries are high and the profit motive is replaced by national motives. Furthermore, the limitation on the investment of capital makes it possible for the state to take an unusually large percentage of the surplus for current consumption. During a war state control prevents the escape of taxable capital from the country. Low taxes during the war mean high taxes after the war when the reconstruction needs of countries are great. Finally, in a period of inflation taxes, based on ability to pay, are easily borne. If they are not levied during the war, taxes imposed later to meet the interest on bonds bear heavily upon the community during a period of deflation when the taxpayer turns over to the bondholder a dollar of larger purchasing power than that loaned. War loans involve a redistribution of wealth after the war in favor of the war profiteer.

2. THE ARGUMENT AGAINST TAXES—The arguments against very heavy taxation are both theoretical and practical. A very

[15] Life and Writings of Dallas. Quoted in Adams, *ibid.*

heavy tax would compel borrowing and thus lead to some inflation. To the extent that these borrowings exceed the normal borrowings in time of peace, inflation must result.[16] Furthermore, heavy taxes on business enterprises during the war may at the very moment when maximum output is needed repress production and thus reduce rather than enlarge the social surplus. Excessive taxes may injuriously lower the standard of living and may dry up the sources of funds for the support of social activities not recognized by the state. High taxes which would seriously curtail consumption might create resentment and opposition on the part of the community and break the morale needed for victory, even though a similar or greater burden resulting from rising prices would be accepted with resignation. Inflation is a financial anesthetic which makes the pain of reducing one's purchasing power tolerable. High taxes demand the fortitude of the old-fashioned surgical operations.

But the chief objection to an all-tax policy is the matter of administration. Heavy taxes would involve industrial chaos and even bankruptcy, so that the receipts from taxation in practice would be far less than the estimates. Furthermore, a program of taxes requires an interval for their accumulation and collection, but wartime demands are immediate and must be met before taxes can be obtained.

As a matter of administration heavy taxes increase the difficulties of collection and evasion is proportional to the pressure of the tax. Since a war cannot be financed entirely by taxation, taxes should not be so heavy as to interfere with the issue of necessary loans.

3. CONCLUSIONS.—The use of taxes in financing a war appears as an indispensable adjunct to a loan policy. If taxes are adequate to meet the interest on all its loans, a nation's credit remains unimpaired. But in addition to this function, a taxation policy may be used for defraying part of the expenses of the war. If a country has a broad and diversified scheme of taxation, in which the levies are light during times of peace, it is in an excellent position to expand the existing system by increasing the rate of taxation; but in addition new channels of taxation must be tapped, primarily

[16] Scott, W. R., and Pigou, A. C., *ibid.*

such as are adapted to the economic conditions during the war, such as may without injustice or hardship be abandoned after the war, or may be used in the rapid retirement of the debt.

(c) *Combination of Loans and Taxes*

1. THEORY—Theoretically, a war could be best financed by taxation. Practically, such a plan is impossible. To take the entire social surplus for the use of the state would imply that we have a socialist state, that the social motive had completely displaced the individual motive. But under the present regime the motive of self interest still functions. Wars cannot be financed entirely by taxes. Theoretically the socialist state might finance a war correctly. But theoretically socialist states will not fight. Apparently, therefore, the states of the modern order that do fight, must in financing their wars cause suffering to the poor of the war-waging generation and of the bond-redeeming generations. "Why we are content, in the beginning, with socializing for war only within the narrow limits of the military forces is probably not hard to explain. We know that the present economic system works and we think we know how it works. We have faith that we can get immediate results by using the driving power of love of gain, or at least by giving a money reward to those who make war products. Any radically different scheme of industrial organization for war, substituting, as it would, new and untried motives of human action for the old and tested springs of action, would be experimental. The building of an entirely new industrial system would require time, time which we can ill spare in the rush of war preparation. Then, too, the consequences of the possible failure, during war, of such an experiment are too awful to contemplate." [17]

The difference between loans and taxes as methods of financing a war disappear if the after-war taxation has the same incidence as war-time taxes would have under a just all-tax plan. The danger is that the vested interests may be able to shift the burden to the poor and politically impotent and unorganized classes. In other words, the theoretical benefits of an all-tax policy of war finance may be secured by an equitable tax scheme after the close of the war. Since moderate taxes after the war can be made more

[17] Plehn, Carl C., *ibid.*

just and less escapable than heavy and hastily prepared tax schemes during the war, the leading objection to the loan policy of war finance falls to the ground.

Under the present economic order, the individual must be permitted to retain a portion of his surplus income in order to stimulate him to effort. The state can, however, obtain the benefits that would accrue to it under an all-tax policy, by preventing its citizens from wasting their surplus, by regulating capital issues, by restricting lending abroad, by conserving bank credit, by liquidating assets held abroad, and by forced loans to take up the surplus income.

In conclusion, it may be said that under the present economic regime wars must be financed partly by loans and partly by taxes. No tax scheme can be perfectly just. A loan scheme may be less inequitable than some tax programs. Taxes reach only the honest rich. The dishonest rich or social slacker dodges the tax. Loans bring to the service of the warring nation funds from the tax dodger and reach the large number of tax-exempt. Loans filter into nooks where taxes cannot reach. Inflation, whether by bonds or by deposits or by paper currency, hits everybody, rich or poor, regardless of ability to pay. We have not yet learned how to finance a war without using all three methods, taxes, loans and inflation.

2. THE PRACTICE—There are several principles which determine the relative reliance upon loans and taxes in the financing of a war. Primarily, the war must have popular support. The political principle underlying the financing of the war must be rooted in the hearts of the people, so that the patriotic appeal may be made effectively, even at the expense of economic considerations. Again, the fiscal principle is important, that the financing of war should be merely a development of the peace-time fiscal program. The weakness in Germany's financing of the World War was the lack of power on the part of the federal government to levy an income tax. French fiscal policy during the war was hampered because the income-tax program put into effect before the war had not been perfect in its administrative details. The brilliant success of America's war financing was due to the almost providential inauguration of the income tax in 1913. Britain's time-tested income tax was the backbone of her financial structure. Finally, the psychological element is important. Steep taxes are borne willingly if the rates are gradually raised to a high level which would call

forth strong protests if levied suddenly. The confidence of the people and their approval of the war aims are the limits within which the fiscal policy of the war must be framed.

In considering the apportionment of loans and taxes in the financing of a war, the prime principle that operates is that loans and public credit are always a means of anticipating assured revenue. Assuming a suitable system of taxation, public funds may be obtained soon after the beginning of a war. During the transition period at the outbreak of war taxation should be light so as to permit the rapid adjustment of industry to the war-time program. Subsequently, however, the rates of existing taxes should be increased and new taxes instituted to meet as much of the extraordinary expenditures of the war as is possible, to the limit that war-time production is not curtailed.

In short, a sound financial program for the conduct of the war requires first, that taxation be adequate to meet the interest on the growing debt so that the government may preserve its credit unimpaired and support the price of its outstanding securities, and second, that as much of the extraordinary expenditures of the war as is possible must be met out of extraordinary revenues, out of war taxes. The rest of the funds may be raised by loans. Loans should bridge the gap between war expenditures and war taxes. These may be issued continuously, or in drives within limited periods. Again, temporary loans may be issued in anticipation of tax receipts or in anticipation of the proceeds of long-term bonds. The tax program if carefully planned at the beginning of a war may be so elastic as to stand unchanged until the conclusions of hostilities. However, as between loans and taxes, the burden during war should be gradually shifted from loans to taxes short of the point of interfering with the production of goods essential to the conduct of the war.

B. National Wealth and War Debts

In considering the relation of national wealth and war debts, one must make allowance for several sources of error.

i. *National Wealth*

The figure for national wealth is taken to be the sum of the wealth of the individuals in the country. However, this is not an

accurate standard. The wealth of a nation is not fixed. It depends not only upon its natural resources, but also upon its human resources and its economic policy. The wealth of a nation may rise or fall depending upon a change in any of these factors. The growth of Germany in the two generations before the war and the decline of Spain and Portugal from their position of leadership in the sixteenth and seventeenth centuries serve to indicate upon how many conditions the wealth of a nation depends.

Before attempting to interpret figures of public debt and national wealth or of debt charges and national income, it would be well to investigate the accuracy of the figures. Their value would be nil if the error in the determination of any one figure would be greater than the difference between the corresponding figures for two countries. The sources of error have been pointed out by J. S. Stamp, in his "British Income and Property" (1916), and in his paper "The Wealth and Income of the Chief Powers." [18] There are differences in the definition of wealth and of income and there are differences in the methods of determining them. There is a subjective aspect to estimates of wealth. Cowrie shells have higher value for savages than a Rembrandt has. Again, objectively is the national wealth of a nation the sum total of the personal wealth of the inhabitants, or is the national debt to be deducted therefrom? Furthermore, the wealth of the country may be regarded as the sum total of goods within its boundaries. Some economists, like J. Ellis Barker,[19] would include the undeveloped natural resources, or, it might be, the wealth of the inhabitants, including their foreign possessions but excluding the wealth within the country held by aliens. In addition, estimates of wealth would vary with the degree of ownership from undisputed possession of personal property through the various stages of part interest, trusteeship, and communal wealth. Finally, any periodic or accidental fluctuation in prices or in value would affect the figures of national wealth. Income, on the other hand, would be subject to errors in estimating such earnings as are not paid for in money, as of women and other members of the family in the home.

Even if some common definition of wealth and of income were agreed upon in the several countries, there would still remain

[18] The Journal of the Royal Statistical Society, July, 1919.

[19] Nineteenth Century, May, 1918, p. 928. Reprinted in his "Economic Statesmanship," New York, E. P. Dutton & Co., 1919.

errors arising from the differences in the methods of determination. Data based on taxation statistics are subject to errors resulting from evasions of the tax, omission of certain forms of wealth or income from the tax scheme, and variation in the ratio of income to capital. Income and wealth estimates based on the returns in the annual taxation of capital are subject to local variation and to differences in method of assessment. Inheritance-tax figures have inherent sources of error, when used as a basis for the determination of national wealth. The inventory method, used in the American census, does not account for foreign ownership, omits some forms of wealth, counts some items twice, and divorces earnings from capitalization. Finally, the scientific "census" method calls for a statement of wealth and income from every resident, and in this method also there are several sources of gross error. Therefore, figures of national wealth must be used with reservations.

ii. *Real Wealth and the Paper Debt*

The estimated national wealth of the belligerents amounted to about $600,000,000,000. The war debt is approximately $220,000,000,000. However, the inference that three-eighths of the wealth of the belligerents has been destroyed, is unwarranted. Have lands, forests, mines, factories, homes, ships, railroads, stocks on hand and cash, all assets been three-eighths destroyed? The primary source of error is in the fluctuation in the unit of value. The present units of currency have not the same purchasing power as they had before the war. In other words, the unit in terms of which the war debt is expressed is not the same as that in terms of which the pre-war national wealth is figured. With some of the currencies in Europe depreciated over 90 per cent in terms of the dollar, it is grossly inaccurate to assume that the war cost represents any such fraction of the national wealth as the figures would seem to indicate.

Part of the debt was incurred to meet the needs of the community for food and clothing, which would have had to be satisfied in times of peace. This inevitable consumption was not a loss, except insofar as the consumption was greater during war than during peace. The mere fact that these goods were purchased collectively instead of by individuals, that they were paid for by the state instead of by the consumer himself, does not mean that such consumption represents a loss. Furthermore, the obsolescence

of machinery, and the depreciation of the national plant do not represent entirely a war loss, for they take place during peace as well as during war. In aligning the national energies to the production of essentials, like food and clothing, there is a diversion or a transfer of the forms of wealth. The subjective element enters here. Since the standards of peace differ from the standards of war, it is not sound to argue that the production in times of war of goods not used in times of peace constitute waste entirely, for to some extent new or substitute satisfactions replace the old. Of course to a large extent war-time industrial production constitutes outright waste as in the manufacture of munitions of war.

On the other hand, the decline in the production of luxuries is not a loss of wealth. In fact, peace-time extravagance is similar to war-time destruction, so far as the national wealth is concerned. As a compensation for the losses of war are the new factories built during the war that are capable of being utilized for peace purposes. Again, new industries are developed and the capacity of old ones increased. The costs of the war are met by increasing the nation's productivity, by reducing consumption and thus increasing the surplus. Production is maintained by reason of the replacement of men by women and children. To the extent that decreased production is balanced by decreased consumption there is no loss of national wealth except where the decline in consumption cuts into the nation's vitality.

The real loss in national wealth consists of the loss of man-power, by death or incapacity. Again, some of the capital accumulated in the past is destroyed,—cities, cathedrals, ships, railroads and other capital goods, or the means of production. The loss of territory and of natural resources may be regarded as a loss to a particular country, but it does not constitute a world loss, except insofar as the losing country may be better able, temporarily or permanently, to utilize or develop them. The great material loss of war, however, consists of the loss of current production, war materials, powder, shells, and munitions. These goods do not satisfy reduced or substitute needs. They represent a dissipation of national assets. Furthermore, the failure to produce an annual surplus of goods out of current production which the nations had been accumulating before the war at the rate of ten billion dollars per year, is a very large loss. The national wealth was destroyed insofar as the future productivity of the world was reduced by

undernourishment of the population or the development of internal economic disorder.[20]

In discussing national debt in its relation to national wealth a distinction must be drawn between the domestic and the foreign debt. A foreign debt requires annual interest payments which may be effected by an exportation of goods, and to that extent the debt represents a diminution of the real wealth of a country. But an internal debt is a paper debt; it does not diminish the wealth of the nation as a whole. Repudiation of the internal debt, a capital levy, or a scaling down of values, would leave the nation's wealth unaffected although it might disturb the economic condition of the country. A paper debt, held internally, never ruined a country. During the Revolution France repeatedly repudiated her debt, and yet at the end of the period was undoubtedly richer than at the beginning. On the other hand, the loss of capital goods, the wealth-producing resources, has ruined nations in the past. During the Thirty Years' War the population of Germany was greatly reduced and the national equipment, the farms, and the industrial centers were largely ruined. The Arabian Empire was destroyed when the Turks demolished the irrigation system of Mesopotamia upon which its agriculture depended. The wealth of Venice was destroyed when the change in trade-routes from the Mediterranean to the Atlantic depreciated the importance of her facilities.

iii. *The Future Outlook*

History shows that the rate of increase of wealth in the past has been far more rapid than that of the increase in the public debt. The national debts that staggered the statesmen that incurred them were lightly borne by later generations. Macaulay quotes the wailing of British statesmen in the seventeenth and eighteenth centuries because of the seemingly stupendous debts which they incurred or which were left to them to handle.

"'A million a year will beggar us,' said the patriots of 1640. 'Two millions a year will grind the country to powder,' was the cry in 1660. 'Six millions a year and a debt of ten millions!' exclaimed Swift; 'the high allies have been the ruin of us.' 'A hundred and forty millions of debt!' said Junius: 'well may we say that we owe Lord Chatham more than we shall ever pay, if we owe him such a load as this.' 'Two hundred and forty millions of debt,' cried all the statesmen of 1783 in chorus; 'what abilities

[20] Kriegskosten und Volksvermögen, *ibid.*

or what economy on the part of ministers can save a country so burdened?' . . .

"Such was the origin of that debt which since has become the greatest prodigy that ever perplexed the sagacity and confounded the pride of statesmen and philosophers. At every stage in the growth of that debt the nation has set up the same cry of anguish and despair. At every stage in the growth of that debt it has been seriously asserted by wise men that bankruptcy and ruin were at hand. Yet still the debt went on growing; and still bankruptcy and ruin were as remote as ever. . . .

"We know that if since 1783 no fresh debt had been incurred, the increased resources of the country would have enabled us to defray that debt at which Pitt, Fox and Burke stood aghast. Nay, to defray it over and over again, and that with much lighter taxation than that which we have actually borne. On what principle is it that when we see nothing but improvement behind us, we are to expect nothing but deterioration before us? . . .

"The prophets of evil were under a double delusion. They made no allowance for the effect produced by the incessant progress of every experimental science and by the incessant efforts of every man to get on in life. They saw the debt grow, but they forgot that other things grew as well as the debt. They greatly overrated the pressure of the burden. They greatly underrated the strength by which the burden was to be borne." [21]

The debt dwindles as the resources of a country are unlocked and its manufacturing capacity increased. The figures of the public debt and national wealth of Great Britain illustrate this point.

National wealth (in million pounds)		Public debt (in million pounds)	
Year	Amount	Year	Amount
1703	490	1727	52
1774	1,100	1775	127
1800	1,740	1793	248
1812	2,190	1815	861
1833	3,750	1854	775
1865	6,113	1899	599
1903	15,000	1914	678
1918	24,000	(Mar. 31) 1918	5899

[21] Macaulay's History of England, vol. v, ch. xix, pp. 2,284-2,286, edited by C. H. Firth, Macmillan, London, 1914.

In other words, the national wealth increased three times in the eighteenth century and about ten times in the nineteenth century, or thirty times in 200 years from 1703 to 1903. However, the national debt had increased about thirteen times in the same period, that is, prior to the World War. A similar table covering the United States shows the same difference more strikingly. The national wealth increased six times, but the public debt declined over 50 per cent in 50 years.

Year	National wealth (in million dollars)	Public debt (in million dollars)
1870	30,069	2331
1890	65,837	891
1912	187,739	1028

The universally rapid increase in the wealth of nations is due to the increase in the productivity per man and to the continuous depreciation of money, owing to the increase of the gold supply and more particularly to the increase in the forms of commercial credit. The increase in productivity is due to the application of engineering to industry, to standardized production and to automatic machinery. The depreciation of the currency even in times of peace is an historic phenomenon.

In view of the fact that the war debt is a money debt and also that wealth and income are increasing at an accelerated rate, the repayment of the debt will ultimately involve as little a burden to later generations as the repayment of the debt of the Napoleonic Wars did. The tax revenues of Great Britain in 1815 were about 70 million pounds, and in 1917-18 about 700 million pounds. The wealth and taxable income of Great Britain increased tenfold in the century since 1815. More striking is the growth of the national wealth of the United States, which increased twenty-six-fold since 1850 and three-hundred-and-forty-fold since 1790. If the British Empire adopts in the colonies the methods used by the United States in attaining its present industrial development, the wealth of the Empire will be sixty times as great in the year 2000 and one thousand times as great in the year 2100 as it is to-day. The present war debt will then appear smaller than the Napoleonic debt appears to us.[22]

[22] **Barker, Ellis, Britain's True Wealth and the Unimportance of the**

However, as deflation follows a war, the burden of repayment of debt will temporarily increase. The money which is repaid within a generation will have a greater purchasing power than that which was borrowed.

C. Statistics of Public Finance

i. *National Wealth and Income*

In a consideration of the question of the debts arising from the World War, the figures of national wealth and income over a period of years are of interest. In addition to presenting a fairly accurate picture of the rate of growth of the national wealth and income, such a table shows the relation between the rate of growth of the national debt and that of the national income.

As J. C. Stamp points out in his careful study, "The Wealth and Income of the Chief Powers,[23] the methods of computing national wealth and income are based on so many diverse factors and are calculated in so many different ways that the comparability of the figures for several nations may well be challenged. However, granting even a large percentage of error, the rate of growth over a period of years is so much greater than the probable degree of error, that a series of figures for national wealth and for national income for the same country are not without significance. Taking the figures for the last quarter of the eighteenth century as a basis, we find that up to the beginning of the World War the national wealth of Great Britain increased about fourteenfold and the national income about nineteenfold. On the other hand the national debt of Great Britain at the beginning of the World War was hardly five times as great as in 1763, although for almost a century after the Napoleonic Wars the debt was slowly decreased. The actual revenue collected in the United Kingdom grew twentyfold from the middle of the eighteenth century up to 1913.

The national wealth of France increased sevenfold from 1789 to 1913, and the national income increased about ninefold in the same interval. The public debt of France, however, increased

War Debt, The Nineteenth Century, July, 1918. Also his "Economic Statesmanship," E. P. Dutton & Co., 1919.

[23] Journal of the Royal Statistical Society, July, 1919.

about twelvefold from 1763, more rapidly than the national wealth. The actual revenue increased about thirteenfold from 1750 to 1913. The growth of the debt from 1763 to 1914 was about the same as the growth of the income and of the actual revenue in the same period. This fact is due to the many wars fought by France, to the maintenance of a large public debt, and to the decline of commercial activity and influence.

ESTIMATES OF NATIONAL WEALTH AND INCOME [24]

NATIONAL WEALTH OF THE UNITED KINGDOM

Year	Million dollars	Relative figures	Applying to—	Authority
1660	1,250	23	England and Wales	Petty
1703	2,450	44	"	Davenant
1774	5,500	100	"	Young
1800	8,700	158	Great Britain	Beeke, Edin.
1812	10,950	198	United Kingdom	Colquhoun
1822	13,000	236	"	Lord Liverpool
1833	18,750	340	"	Pablo Pebrer
1840	20,500	373	"	Porter
1860	29,800	542	"	(interpolated)
1865	30,565	555	"	Giffen
1875	42,740	775	"	"
1885	50,185	905	"	"
1888	54,000	982	"	"
1913	79,500	1445	"	Crammond
1914	70,500	1280	"	Stamp

NATIONAL INCOME OF THE UNITED KINGDOM

Year	Million dollars	Relative figures	Applying to—	Per capita
1664	210	34	England and Wales	39.0
1688	225	37	"	41.0
1770	610	100	"	81.5
1800	1,150	188	"	130.0
1822	1,400	230	Great Britain	99.0
1840	2,520	413	United Kingdom	96.0
1860	3,800	623	"	131.0
1889	6,425	1055	"	168.0
1914	10,900	1790 (Stamp)	"	238.0
1914	11,800	1935 (Crammond)	"	258.0

[24] The Dictionary of Statistics, Michael G. Mulhall, George Routledge & Son, London, 4th ed., 1899, pp. 320, 321, 589, 592; also Webb's Supplement; Statesmen's Year Book; Stamp, J. S., Wealth and Income of the Chief Powers; and the Statistical Abstracts and Yearbooks.

National Income of France				National Wealth of France			
Year	Million dollars	Per capita	Relative figures	Year	Million dollars	Relative figures	Authority
1780	800	30.5	100	1789	7,600	100	Lavoisier
1800	1080	38.5	135	1815	9,000	119	Chaptal
1820	1575	52.0	197	1820	12,600	166	(interpolated)
1840	2400	70.5	300	1826	14,200	187	Guyot
1868	4030	108.0	504	1853	25,000	329	Girardin
				1871	35,000	460	Wolowski
1888	5230	139.0	654	1882	45,550	598	Flaix
1913	7290	184.3	911	1913	58,300	717	Pupin

ii. *Growth of Public Debt of the Nations*

In the two centuries from 1713 to 1913, the public debts of the countries for which figures are known increased about seventy times. In the eighteenth century they increased about fourteen times and in the nineteenth century about five times. As a result of the World War they increased about six times. The growth of public debts was due largely to war and to preparation for war, and to a less extent to government-owned public improvements. The growth in the debt from 1713 to 1889 was estimated by Mulhall to be divided as follows:

Use	Amount in million dollars	Per cent
War and armaments	18,050	60
Railways and telegraphs	7,200	24
Roads and bridges	3,900	13
Sundries	805	3
Total	29,955	100

The increase of the debt of the nations of the world may be seen in better perspective when viewed in connection with the historic process of inflation of the currency and the rise in commodity prices. Whereas the public debt of the principal nations rose from about $9,000,000,000 in 1848 to about $43,000,000,000 in 1913, or about five times, the gold production of the world rose from about $13,000,000 per annum in the decade 1831-40 to $460,000,000 in 1913, about thirty-five times. The public debt

Public Debt of the Principal Nations [25]
(in million dollars omitted)

	1713	1763	1793	1816	1848	1870	1889	1913
Great Britain	270	735	1850	4500	3865	4,005	3,490	3,486
France	240	550	160	700	1300	2,520	6,345	6,346
Germany	....	....	....	195	345	740	(a) 240	1,177
Russia	....	....	235	725	450	1,710	3,780	4,537
Austria	50	75	210	495	625	1,700	2,900	3,799
Italy	....	....	....	125	180	1,665	2,300	2,852
Spain	35	55	100	585	565	1,425	1,300	1,814
Portugal	....	....	5	35	110	295	565	948
Holland	....	....	350	550	570	380	445	462
Belgium	....	....	....	....	125	140	385	825
Denmark	....	....	10	60	60	65	55	96
Sweden and Norway	....	....	....	....	10	30	100	259
Greece	....	....	....	....	50	90	115	188
Turkey	....	....	....	....	....	460	900	667
Roumania	....	....	....	....	....	....	180	317
Serbia	....	....	....	....	....	....	65	126
Other Europe	....	....	....	....	....	....	....	159
Total Europe	595	1415	2920	7970	8255	15,225	23,165	28,058
United States	....	....	85	130	50	2,425	1,105	1,028
Latin America	....	....	....	....	85	675	1,665	2,396
Canada	....	....	....	....	25	85	245	483
Australia	....	....	....	....	....	185	855	1,429
India	....	....	45	145	255	540	930	1,475
Japan	....	....	....	....	10	50	250	1,242
Egypt	....	....	....	....	....	185	515	459
South Africa	....	....	....	....	....	10	135	573
Other countries	....	....	....	....	....	....	....	5,797
Total World	595	1415	3050	8245	8680	19,380	28,865	42,940
Relative figures	42	100	216	583	614	1,372	2,039	3,040

(a) Mulhall's figure for the German debt in 1889 is equivalent to 2175 million dollars. In view of the small debt in 1870 and the large indemnity received from France, his figure is obviously incorrect. The Statistical Yearbook of the German Empire gives the debt on March 31, 1889, as 1010 million marks.

of the world rose from $3,000,000,000 in 1793 to about $45,000,000,000 in 1913 or about fifteen times, whereas the world supply of credit probably grew sixty fold in the same interval.

[25] Figures up to 1889 are taken from Mulhall, pp. 260, 699. The 1913 figures are taken from the Statistical Abstract of the United States.

For example, the deposits of the Bank of England in February, 1793, were about £5 million [26] and on July 29, 1914, about £65 million, of public deposits and about £270 million of private deposits, an increase in total deposits of about 67 times.[27] The world's debt in 1913 therefore was relatively smaller than in 1793.

iii. *The Cost of Previous Wars*

In the 120 years from 1793 to 1913, the cost of wars amounted to over $24,000,000,000, or about three-fifths of the difference between the debts of the world at the two dates. The expenditure of the United States in former wars amounted to $5,692,000,000, distributed as follows:

War 1812-1815, with Great Britain	$ 119,000,000
War with Mexico, 1846-1849	173,000,000
Civil War, 1860-1865	3,478,000,000
Spanish-American War, 1897-1900	1,922,000,000

The cost of wars to Europe in the same interval amounted to about $18,400,000,000 distributed as shown in the table on page 30.[28]

The cost of the World War was over six times as great as the cost of all the wars in the previous 120 years. The third British war loan issued in 1917 was almost as great as the entire cost of the 22 years of war with France, ending in 1815. The Fourth Liberty Loan, floated in October, 1918, was twice as great as the total cost of the Civil War and greater than the cost of the Napoleonic Wars. The total cost of the wars of Europe and of the United States from 1793-1913 was less than the increase in the debt of the British Empire during the World War. The cost of the wars in Europe during the same period was about half of Germany's increase in debt during the World War.

iv. *Growth of World Revenue*

The rapid increase in the public debt in the past two centuries was more than matched by the increase in the revenues of the principal countries. Whereas in the period from 1713 to 1914 the

[26] Report of Committee on Charter of Bank of England, 1831-2, Appendix No. 5, presented in Canaan's, The Paper Pound of 1797-1821. London: P. S. King & Sons, 1919.

[27] London Economist.

[28] Statement of the Liberty Loan Bureau, Treasury Department, November 10, 1917.

Dates	Countries engaged	Costs
1793–1815	England and France	$6,250,000,000
1812–1815	France and Russia	451,000,000
1828	Russia and Turkey	100,000,000
1830–1840	Spain and Portugal	250,000,000
1830–1847	France and Algeria	190,000,000
1848	Revolts in Europe	50,000,000
1854–1856	England	371,000,000
	France	332,000,000
	Sardinia and Turkey	128,000,000
	Austria	69,000,000
	Russia	800,000,000
1859	France	75,000,000
	Austria	127,000,000
	Italy	51,000,000
1864	Denmark, Russia and Austria	36,000,000
1866	Prussia and Austria	330,000,000
1864–1870	Brazil, Argentina and Paraguay	240,000,000
1865–1866	France and Mexico	65,000,000
1870–1871	Germany	954,000,000
	France	1,580,000,000
1876–1877	Russia	807,000,000
	Turkey	403,000,000
1900–1901	Transvaal Republic and England	1,000,000,000
1904–1905	Russia and Japan	2,500,000,000
1913	Balkan Wars	1,264,000,000
	Total	$18,423,000,000

public debt of the principal countries of the world increased about 72 times, the revenue increased 122 times from 1680 to 1913. In the century preceding 1913 the public debt increased about five times and the revenue increased about twelve times. In other words the rate of increase of public revenue is greater than the rate of increase of the public debt, particularly during the nineteenth century. During the eighteenth century the revenue increased about sixteenfold and the public debt about fourteenfold. Several important conclusions may be drawn from these facts. First, wars do not impoverish the world permanently. Again, industrial development proceeds at such a pace that the public revenues may be rapidly increased. This would indicate that governmental

policies, fiscal or otherwise, should interfere as little as possible with the development of industry in order that the growth of wealth may in itself cause the burden of the public debt to diminish. One may not conclude, however, that war pays, for the growth of wealth in the nineteenth century was due to scientific and technical achievements and not so much to the grabbing of neighbors' lands, for this constituted merely a transfer of wealth from country to country and not a net increase of the wealth of the world. Great Britain, which engaged in only four wars from 1793 to 1913, experienced a much greater increase in national wealth than France, which engaged in six in the same period.

The table on page 33 gives the revenues of the principal countries of the world.

That the world's revenue tends to increase more rapidly than the world's debt is evident in a comparison of the ratio of revenue to debt in 1750 and 1889, in which years the figure was about 16 per cent, and at the outbreak of the World War when the ratio of world revenue to world debt was about 25 per cent. The period from 1750 to 1889 was one of almost continuous warfare, and therefore of mounting debt. Yet the growth of income kept pace therewith. But the interval from 1889 to 1914 was a period of relative peace and therefore while the debt of the world increased more slowly, the revenue rose considerably.

D. Total Cost of the War [29]

The estimate of the cost of the war depends upon the adoption of a national or world point of view. The loss to one country of territory or of natural resources constitutes a mere transfer of wealth, so far as the world is concerned. The world loses as a result of such a transfer only if the new owners for any reason are unable to produce additional wealth as economically as the former owners.

[29] Rapport Général, Chambre, France, a study of war finance of the chief belligerents, No. 4133, 1918, pp. 9-291 and No. 6158, 1919, pp. 5-300.
Laughlin, J. Laurence, Credit of the Nations, N. Y., Scribners, 1919.
Bogart, E. L., The Direct and Indirect Costs of the World War. New York: Oxford University Press, 1919.
Seligman, E. R. A., The Cost of the War and How It Was Met, American Economic Review, ix: 4, 739-770, December, 1919.
Gottlieb, L. R., Indebtedness of Principal Belligerents, Quarterly Journal of Economics, xxxiii: 3, 504-531, May, 1919; Debts, Revenues

i. *Errors in Estimating the Cost*

The intangible costs are indeterminable. The loss in satisfaction of human wants during the war, the pain and suffering of the combatants, the worry and grief of the civilian population, the social unrest following the war, and the obstructing of social progress are all incapable of being measured. In attempting to estimate not the indefinite and intangible costs of the war but the financial cost the student is confronted by a number of difficulties. Not only are the real costs impossible to appraise, but even the money costs of war are difficult to determine.

(a) *The Time Factor—*

The beginning of war expenditures may be fixed at a definite date, but the end cannot be so fixed. The expenditures resulting from war do not end with the cessation of hostilities, with the demobilization of the armies, nor with the signing of the treaty of peace. For the world as a whole, expenditure resulting from war continues until the ruins are repaired. But for each nation, the war cost may include the payment of reparation to other countries and the payment of pensions or relief moneys to its own inhabitants. It is not scientifically accurate to charge to the cost of the war the expenditures for housing, extension of railroads, and the many other accumulated demands of normal years, the satisfaction of which was deferred during the war. But the excess cost of these expenditures above normal years is attributable and chargeable to the war.

(b) *The Currency Factor—*

All calculations of the cost of the war are subject to another serious drawback. No measurement of quantity can be accurate if the unit in terms of which the results are expressed varies con-

and Expenditures and Note Circulation of Principal Belligerents, xxxiv: 1, 161-205, November, 1919; Les Finances d'Après Guerre, Revue de Science et de Législation Financières, xviii: 4, pp. 613-713, October, 1920.

Ayres, L. P., The War with Germany. Washington: Government Printing Office, 1919.

Jèze, Gaston, Les Finances de Guerre, Les Methods Financières, Les Emprunts de Guerre, are surveys of the major powers, in the Revue de Science et de Législation Financières, 1915-1920.

Internal War Loans of the Belligerent Countries. New York: National City Company, 1918.

See also the sources and references under chapters dealing with individual countries.

REVENUES OF THE PRINCIPAL COUNTRIES [30]

(in million dollars)

Country	1680	1750	1810	1850	1889	1913
United Kingdom	10.6	46.0	279.0	291.0	442.5	918.8
France	24.0	71.0	200.0	255.0	609.0	914.6
Germany	10.0	35.0	57.5	119.0	336.0	879.7
Russia	2.0	8.0	55.0	195.0	444.0	1,832.5
Austria	.....	20.0	52.0	100.0	374.0	1,167.5
Italy	.....	7.5	23.0	60.0	360.0	512.8
Spain	9.6	16.6	30.0	57.5	177.0	224.9
Portugal	.....	.....	6.0	16.0	42.0	82.0
Sweden	.....	.....	5.0	7.5	24.0	73.4
Norway	.....	.....	.....	4.0	12.0	41.6
Denmark	.....	.....	5.5	7.5	15.0	30.6
Netherlands	.....	11.0	24.0	29.0	50.5	91.8
Belgium	.....	.....	.....	23.5	64.5	146.2
Switzerland	.....	.....	.....	5.0	14.5	19.0
Greece	.....	.....	.....	5.0	15.5	25.9
Turkey	.....	.....	15.0	45.0	116.0	134.3
Other Europe (estimated)	18.8	14.9	18.0	30.0	70.0	239.7
Total Europe	75.0	230.0	770.0	1250.0	3166.5	7,335.3
United States	.....	.....	9.5	46.0	403.0	1,014.1
Canada	.....	.....	.....	5.5	38.0	168.7
Mexico	.....	.....	.....	15.0	27.0	64.5
Cuba	.....	.....	.....	7.5	12.5	37.9
Argentina	.....	.....	1.0	4.5	27.0	145.3
Brazil	.....	.....	9.0	20.0	70.5	192.7
Chile	.....	.....	.....	5.0	25.0	72.4
Peru	.....	.....	.....	10.0	7.5	17.3
Venezuela	.....	.....	.....	2.5	5.0	10.1
Colombia	.....	.....	.....	2.5	5.0	14.1
India	.....	.....	78.0	138.0	276.0	386.2
Persia	.....	.....	.....	7.5	8.5	10.2
Japan	.....	.....	.....	25.0	65.5	292.2
China	.....	.....	.....	90.0	130.0	193.3
South Africa	.....	.....	.....	2.5	20.0	84.6
Egypt	.....	.....	.....	20.0	48.5	79.7
Australia	.....	.....	.....	4.5	138.0	285.7
Other count ies (est.)	15.0	20.0	32.5	44.0	126.5	589.0
Total World	90.0	250.0	900.0	1700.0	4600.0	10,993.3
Relative figures	36	100	360	680	1840	4400

[30] Mulhall's Dictionary of Statistics, 4th ed., pp. 257, 699, revised for India and Germany by comparison with figures in Statistical Abstract for India for 1889-1890, the Statesman's Yearbook, 1899, and the Statistisches Jahrbuch fuer das Deutsche Reich. The 1913 figures are taken from the Statistical Abstract of the United States.

tinually during the process of measurement. How tall would the Woolworth Building be if the unit of measurement, the foot, became shorter as one approached the top? Or what would be the distance between New York and Washington if the mile shrank in length while one measured? Inflation went on continuously during the war and for a while after its close. For example on February 28, 1920, measured in terms of dollars the pound sterling was depreciated 30 per cent, the French franc 64 per cent, the Belgian franc 62 per cent, the lira 72 per cent, and the mark 96 per cent. Or measured in terms of internal values of a country, the currency depreciated in terms of other commodities, and prices rose continuously and caused a continuous increase in expenditure as the war continued. The increase in the note circulation, which is presented below, shows the unreliability of the unit of currency as a measure of the nominal or money cost of the war.

(c) *The Administrative and Accounting Factors*—

The technical aspects of the question also make exact determination of the cost of the war difficult. The strain of war played havoc with budget calculations so that they no longer were consistent or comparable with peace-time budgets. Furthermore, civil expenses could not be strictly separated from military expenses, such as wage bonuses, bread subsidies, and civilian relief. Profits or losses from operation of government enterprise were ascribable to the war in some instances and yet were not so shown. Bonds were offered at a discount, so that the actual cash received does not tally with the par value of the debt which is counted as the cost of the war. Treasury bills were included as well as the bonds into which they were converted, or the taxes for which they were receivable. In addition to these difficulties in estimating the cost within any given country, additional complexities arise in comparing the figures for several countries. At best the comparing of budgets must lead to inaccurate conclusions, owing to a lack of uniformity in their items. Finally, the withholding or juggling of facts, as best served the expediencies of the moment, has added an additional element of inaccuracy in the determination of the exact amount.

(d) *International Aspects*—

While the cost of the war to the world as a whole will not be affected if international obligations are not carried out, the cost

to individual nations will greatly vary. If Germany does not pay the reparation charges to Belgium and to France the cost of the war to each one of them will be different than if she does carry out her treaty obligations. Then there are the inter-Allied loans, which were extended by the United States to her associates and by Great Britain and France to the Allied Powers. According to Austen Chamberlain, Great Britain has already written off 50 per cent of the advances that she made. From all sides, with increasing pressure the suggestion is put forward that all inter-governmental loans be canceled. Under no conditions should the inter-governmental advances be counted twice in calculating cost to the world. If the debt is to be paid it should be included in the cost of the war to the borrower but not to the lender. If the debt is canceled by the lender or repudiated by the borrower, it should be counted as a cost of the war to the lender. At all events, until the final disposition is made of these debts, among the Allies, it will be impossible to give an unconditional estimate of the cost of the war to each of the powers involved, though of course the world totals will not be affected.

ii. *The Direct Costs of the War*

The direct costs of the war constitute the actual cash expenditures incidental to its prosecution. They are definite in nature if not always ascertainable in amount. To the extent that the money is raised through loans, internal or external, or through taxes, the cost may be accurately measured. But the issue of fiat currency and the inflation of credit give the various governments a purchasing power over goods and diminish the purchasing power of the people in a way that makes it impossible to determine the cost precisely. The total direct cost of the war is the sum of the loans and taxes. Money raised by inflating the currency is included in the governments' treasury bills held by the banks of issue, in some cases.

(a) *The Total Direct Cost—*

Several estimates have been made of the cost of the war, the variation between which is due to differences as to period covered, and differences as to items included. The Statistics Branch of the General Staff of the United States War Department figured the direct cost of the World War to be $186,000,000,000. Edgar Crammond in Great Britain estimated the total direct cost of the

war to be about $210,000,000,000. E. L. Bogart in his very comprehensive study estimated the total direct cost to be $186,333,000,000. L. R. Gottlieb estimated that the increase in gross indebtedness of the principal belligerents was $212,000,000,000, but this sum included about $29,000,000,000 of Russian paper currency, the deduction of which would make the increase of gross indebtedness $183,000,000,000. Deducting advances among the Allies of about $23,000,000,000, counted twice, the net increase in the debt of the world would be $160,000,000,000. The addition of $32,000,000,000 in taxes would make the total direct cost of the war $192,000,000,000. E. R. A. Seligman reckons the total war expenditures to be about $232,000,000,000 and the net war expenses about $210,000,000,000. He ascribes his high result to the fact that he used later figures than did other writers.

Assuming that the total direct cost of the World War is about $200,000,000,000 this figure is ten times the total foreign investments accumulated by Great Britain before the war, or more than five times the foreign investments of the entire world. The world's annual foreign trade before the war was $40,000,000,000, which is about one-fifth the cost of the war. The world production of gold from the discovery of America up to 1913 aggregates about $15,000,000,000 or about one-thirteenth of the cost of the war. In terms of American values, the cost of the war to the world is approximately equal to the total estimated wealth of the United States, or over ten times the valuation of the railroads of the United States, or about 400 times the annual value of new building construction, about 50 times the value of our foreign trade before the war, and about 60 times the value of the general stock of gold in the United States, on January 1, 1920.

(b) *Loans*—

1. Public debt of belligerents—The war was financed very largely by loans.

A study of this table reveals several striking facts. Before the war the largest public debt was carried by France, with Russia and Austria-Hungary following. After the war the largest debt was carried by Germany with Great Britain, France and Austria-Hungary following. The greatest war debt was incurred by Germany and the next greatest by Great Britain. France, Austria-Hungary, the United States and Russia incurred approximately the

TOTAL WAR EXPENDITURES
(In million dollars. Foreign currency converted at mint parity)

Country	Amount		Period
Great Britain	$41,887		Aug. 4, 1914, to Mar. 31, 1919
Australia	1,461		Aug. 4, 1914, to Mar. 31, 1919
New Zealand	365		Aug. 4, 1914, to Mar. 31, 1919
Canada	1,545		Aug. 4, 1914, to Aug. 31, 1919
South Africa	243		Aug. 4, 1914, to Mar. 31, 1919
India	584		Aug. 4, 1914, to Mar. 31, 1919
British Empire		$46,085	
France	32,617		Aug. 3, 1914, to Mar. 31, 1919
Russia	26,522		Aug. 1, 1914, to Oct. 31, 1917
Italy	15,636		May 23, 1915, to May 31, 1919
Belgium	1,387		Aug. 2, 1914, to Oct. 31, 1918
Roumania	907		Aug. 27, 1916, to Oct. 31, 1918
Serbia	635		July 28, 1914, to Oct. 31, 1918
United States	32,261		April 5, 1917, to June 30, 1919
Entente Powers		156,050	
Germany	48,616		Aug. 1, 1914, to Oct. 31, 1919
Austria-Hungary	24,858		July 28, 1914, to July 31, 1919
Turkey	1,802		Nov. 3, 1914, to Oct. 31, 1918
Bulgaria	732		Oct. 4, 1915, to Oct. 31, 1918
Central Powers		76,008	
Total Gross Expenditures		$232,058	
LOANS TO ALLIES			
Great Britain	8,467		
France	1,293		
Germany	2,261		
United States	9,102		
Total Inter-Allied loans		21,123	
Total net war expenditures		210,935	

same war debt. The ratio of post-war to pre-war debt, or the relative growth of the debt, was greatest for Germany with the United States following second. These figures indicate not merely that a large war debt was incurred but also that the pre-war debt had been reduced to very small proportions. For instance, the French public debt before the war was about five times as large

as that of the United States or Germany, and the British debt about three times as large. The Japanese debt remained practically constant. The victors spent almost twice as much as the vanquished—a striking commentary on the cost of unpreparedness. The debt of the victors grew sixfold, whereas that of the vanquished multiplied about sixteenfold. However, such a statistical generalization is misleading, as the problem of paying the war debt affects each country individually, regardless of its Allies, and there can be no joint action of groups of countries such as will carry into effect the implications of a statistical averaging of the debt. The weak countries overburdened with debt do not find their debt lightened merely because they were the Allies of countries which by reason of wiser financing or more wealth incurred a relatively smaller debt.

PUBLIC DEBTS OF BELLIGERENTS
(in million dollars)

Country	Before the War		After the War		War debt	Ratio of post-war to pre-war debts
	Date	Amount	Date	Amount		
Great Britain	Aug. 4, 1914	3,165	Mar. 31, 1919	37,221*	34,056	11.7
Australia	Aug. 4, 1914	472	Jan. 31, 1919	1,634	1,162	3.5
Canada	Aug. 4, 1914	332	Aug. 31, 1919	1,684	1,352	5.1
New Zealand	Aug. 4, 1914	487	Mar. 31, 1919	828	341	1.7
South Africa	Aug. 4, 1914	614	Mar. 31, 1919	846	232	1.3
British Empire		5,070		42,213	37,143	8.3
France	July, 1914	6,291	Dec. 31, 1918	32,322	26,031	5.2
Russia	July, 1914	4,623	Sept. 1, 1917	25,383†	20,760	5.5
Italy	May, 1915	2,621	May 31, 1919	15,009	12,388	5.7
Belgium	Aug. 2, 1914	722	April 30, 1919	1,888	1,166	2.6
Roumania	Aug., 1916	292	Oct. 31, 1918	1,020	728	3.5
Serbia	July, 1914	271	Oct. 31, 1918	730	459	2.7
Japan	July, 1914	1,247	July 31, 1918	1,265	18	1.0
United States	April 5, 1917	1,190	June 30, 1919	24,232	23,042	20.4
Allied Powers	....	22,327	....	144,062	121,735	6.4
Germany	Aug. 1, 1914	1,126	Oct. 30, 1919	48,552	47,426	42.3
Austria-Hungary	Aug. 1, 1914	3,726	July 31, 1919	28,584	24,858	7.7
Turkey	Nov., 1914	485	Oct., 1918	2,002	1,517	4.1
Bulgaria	Oct. 4, 1915	219	Oct. 31, 1918	974	755	4.4
Central Powers	....	5,556	....	80,112	74,556	15.8
Grand Total	....	27,883	....	224,174	196,291	8.0

* Counting on repayment of one-half of the loans to the Allies, or $3,970,000,000.
† The additional debt contracted by the Bolshevist Government is not included.

2. DEBT CHARGES—Several important facts stand out. The annual debt charges for nearly all of the belligerents and for each group of belligerents increased more rapidly than did the debt.

PUBLIC DEBTS OF PRINCIPAL BELLIGERENTS [31]
(in million dollars)

The increase was due to the higher interest rates borne by war loans than by pre-war loans. In other words, the percentage of charges on the debt to the debt itself was greater after the war than before the war. Both before and after the war the percentage of the annual debt charge of the Central Powers was greater than that of the Allied Powers. The growth of the debt was about 6.4 times for the Allies and about 11.1 times for the Central Powers. The growth of the annual debt charges was about 7.1 times for the Allies and 13.5 times for the Central Powers. Before the war the United States had the lowest percentage of annual charges on the debt and Turkey the highest percentage, although Bulgaria, Greece, Russia, and Japan, paid 4 per cent or more annually on their outstanding debts. As a result of the war there was a general increase in the percentage. The annual debt charges of all the powers enumerated was about $1,000,000,000 before the war, and about $9,300,000,000 after the war. In comparison with the total pre-war annual debt charges of all the powers enumerated, the annual debt charge of Germany alone after the war was twice as great, that of France almost twice as great, that of Britain almost 1.5 times as great, and that of the United States almost as great. Comparing the annual charges before the war and after the war by countries, we find that the ratio of the increase was 52 times for Germany, 38 times for the United States, 12 times for Great Britain, 8 times for France, and 6 times for Italy.

3. Per capita debt—Of the major belligerents, the United States had the lowest per capita debt before the war, and Germany was next. Great Britain had a lower per capita debt than Italy, and France had the highest figure on the list, with the exception of New Zealand, whose debt probably include liens on public government-owned industrial enterprises. The per capita debt of France before the war was about 15 times as great as that of the United States, about 10 times that of Germany, and more than twice that of Great Britain, and of Italy. Among the major powers there is a fairly close correspondence between large per capita debts and high rates of interest, an important consideration affecting public credit and financial preparedness for war. Before the war the average debt per capita among the Allied Powers was but slightly greater than among the Central Powers. Combined,

they averaged about $45 per capita, though this figure represents the mean between wide variants. It has significance only in connection with the close financial cöoperation, which existed during the war.

The per capita debt after the war was greater among the Central Powers than among the Allies, the ratio being 1.6 to 1. The per capita debt among the major belligerents was highest for Great Britain, with France, Germany, Austria, Hungary, Italy, and the United States following in order. The per capita debt of the United States after the war was about 30 per cent of that of Great Britain, and about 33 per cent of that of France. It is interesting to note that in spite of the fact that Great Britain had the highest debt per capita, the debt charges per capita were highest for France. The reason is obvious. France was unable to borrow at favorable rates because her pre-war debt was very large and because her war-time taxation was ineffective. The debt charge per capita of Germany was second highest and that of Great Britain third in the list. Japan had the lowest figure. The debt charges per capita among the Central Powers was 1.9 times as great as among the Allied Powers.

4, DEBT AND NATIONAL WEALTH; DEBT CHARGES AND NATIONAL INCOME—Bearing in mind the sources of error in the estimates of national wealth and of national income, it is probably true that the extent of error is not so great as to make meaningless the relation between national wealth and national debt, or national income and annual debt charges. The national wealth and national income before the war are comparable with the national debt and annual debt charges before the war, but not with the post-war figures, which are in terms of inflated monetary standards. Therefore the interpretation of the table showing the financial standing of the principal belligerents must be limited. Before the war the national wealth of the countries known subsequently as the Allied Powers, was 3.5 times as great as that of the Central Powers. The pre-war national income of the Allied Powers was 4.3 times that of the Central Powers. The Allied Powers enjoyed an income of 14.9 per cent on their national wealth and the Central Powers an income of 11.9 per cent. Before the war both groups of powers had mortgaged their national wealth to approximately the same small extent, and the debt charges of the two groups constituted

a very small percentage of the national income. However, within each of the groups there was a very wide range of differences.

PER CAPITA DEBT AND ANNUAL DEBT CHARGES OF PRINCIPAL BELLIGERENTS

Country	Population (thousands)	Before the War		After the War	
		Debt per capita	Debt charges per capita	Debt per capita	Debt charges per capita
United States	106,653	$ 11.33	$0.22	$249.38	$8.38
Great Britain	46,089	75.03	2.58	817.04	30.83
Canada	8,361	40.19	1.55	189.45	13.75
Australia	4,971	18.71	0.60	325.69	10.06
New Zealand	1,162	383.82	11.19	631.67	18.93
France	39,700	166.20	6.35	768.11	48.61
Italy	36,717	82.55	2.81	408.78	15.71
Japan	57,998	21.74	0.93	22.14	0.90
Russia	182,183	27.95	1.20	138.30	4.20
Belgium	7,658	94.28	3.26	246.67	11.10
Greece	4,950	37.98	1.62	105.25	3.64
Total Allied Powers	496,442	45.19	1.67	287.63	11.95
Germany	67,812	17.18	0.62	589.97	32.46
Austria	30,958	84.99	3.26	551.42	20.09
Hungary	21,410	74.82	2.48	416.11	16.21
Turkey	21,274	31.35	2.12	94.11	4.14
Bulgaria	5,518	30.99	1.45	209.86	19.75
Total Central Powers	146,972	42.43	1.69	470.48	22.91
Grand Total	643,414	44.56	1.68	329.40	14.45

The United States' pre-war national wealth was about 45 per cent that of the total for the Allied Powers, and 1.6 times that of the Central Powers. The other countries, in the order of national wealth, were as follows: Germany, Great Britain, Russia, France, Austria, Italy. The pre-war national income of the United States constituted 54 per cent of that of the Allied Powers, and 2.3 times that of the Central Powers.

The ratios of income to national wealth show wide variations which may indicate either the greater profitableness of the investments of some countries or the extent of error. Why industrialized Belgium and agricultural Hungary should show the same figures,

or why the United States, with her abundant resources and relatively sparse population, and Italy, with her scant resources and abundant population, should show almost the same returns, are questions that emphasize the limited utility of the figures.

DEBT AND NATIONAL WEALTH: DEBT CHARGES AND NATIONAL INCOME

(in million dollars)

Country	Pre-war national wealth	Pre-war national income	Ratio of income to wealth	Before Entering War: Debt as percentage of national wealth	Before Entering War: Debt charges as percentage of national income	At End of the War: Debt as percentage of national wealth	At End of the War: Debt charges as percentage of national income
United States	204,400	35,300	17.3	0.59	0.07	13.01	2.53
Great Britain	69,600	11,000	16.1	4.97	1.08	54.10	12.92
France	58,500	6,000	10.3	11.28	4.20	52.13	32.17
Italy	22,800	4,000	17.6	13.29	2.58	65.83	14.43
Japan	11,700	1,700	14.5	10.78	3.18	10.97	3.05
Russia*	60,000	6,500	10.8	8.49	3.35	90.67	11.78
Belgium	15,000	1,300	8.7	4.81	1.92	12.59	6.54
Total Allied Powers*	442,000	65,800	14.9	4.83	1.21	37.86	.8.70
Germany	80,500	10,500	13.1	1.45	0.40	49.70	20.96
Austria	23,500	2,400	10.2	11.20	4.21	72.64	25.92
Hungary	16,500	1,400	8.5	9.71	3.79	53.99	24.78
Turkey	4,000	500	12.5	16.68	9.00	50.05	17.60
Bulgaria	4,000	500	12.5	4.28	1.60	28.95	21.80
Total Central Powers	128,500	15,300	11.9	4.85	1.63	53.81	22.01
Grand total	570,500	81,100	14.2	4.84	1.29	41.45	11.21

* Eliminating the Bolshevist currency, equivalent to $28,966,000,000, the revised percentage of debt to national wealth would be for Russia 42.30, for the Allied Powers 32.30, for all belligerents 37.15 per cent.

The percentage of pre-war debt to national wealth was lowest for the United States and second lowest for Germany. Turkey had the highest percentage, and the other countries stood in the following order: Italy, France, Austria, Japan, Hungary, and Russia. The accuracy of these figures in general is indicated by the fact that the percentages of debt to national wealth for the total Allied Powers, for the total Central Powers, and for the grand total of all the countries listed, bear much the same relation to each other as do the figures for the pre-war per capita debt of these groups of nations. The post-war figures for the percentage of debt to national wealth for the two great groups of powers also tally approximately with the per capita debt at the same date.

That is, the relative losses of the two groups of powers as indicated by these tables are consistent. However, a serious error is undoubtedly involved in a comparison of the post-war national debt and the pre-war national wealth. It is absurd to think that the leading countries of the world have on the average lost over 40 per cent of their national wealth as a result of the war or that individual countries, like Italy, and Great Britain, have lost over 50 per cent. The source of the error undoubtedly is the fact that pre-war national wealth was estimated in terms of stable currency standards and post-war national debt in terms of inflated values.

5. INTER-ALLIED LOANS—Both on the origin of the national debt and the after-war problem of liquidating them, the question of inter-Allied loans has a most vital bearing. Up to the early part of 1919 the financially strong countries had advanced about $22,000,000,000 to the weaker members of their groups. The total foreign debt of Great Britain, France, and Italy was as follows: [22]

Country	Date	Approximate amount (in millions)
Great Britain	Mar. 31, 1919	$6570
France	Mar. 31, 1919	5211
Italy	May 30, 1919	3669

These governments had in turn loaned to other governments the following amounts:

Country	Date	Approximate amount (in millions)
United States	April 1, 1920	$9660
Great Britain	Mar. 31, 1919	8695
France	May, 1919	2413
Germany	Mar. 30, 1919	1794
Japan	Sept. 1, 1918	574

[22] For details see chapter on Inter-Allied Debts.

Advances by the United States, Great Britain, and Germany, were as follows:

CHIEF ADVANCES BY BELLIGERENTS
(in million dollars)

By United States to—		By Great Britain to—		By Germany to—	
Great Britain	4316	France	170	Austria and Hungary	914
France	3048	Italy	2065	Bulgaria	510
Italy	1619	Russia	2840	Turkey	370
Belgium	343	Belgium	435		
Russia	187	Serbia	90		
Greece	48	Other allies	240		
Czecho-Slovakia	55	Dominions	853		
Roumania	25				
Serbia	27				
Cuba	10				
Liberia	5				

The repayment of inter-Allied indebtedness depends upon the relative inflation in the borrowing and lending countries, relative taxation and the rapidity of liquidation after the war, the reparation payments, and the financial clauses of the treaty.

In the origin of inter-Allied indebtedness the considerations were, the need for foreign goods to prosecute the war, the common aim and therefore mutual support in achieving victory, and the extent of the cost to the borrowing and lending belligerents. What the ultimate disposition of these debts is to be is difficult now to say. After the Napoleonic Wars, Britain canceled part of the debts of her allies to her. The cost of policing Cuba during the first decade of the twentieth century is an unpaid obligation of Cuba to the United States. England has already written off 50 per cent of Russia's debt to her. On the other hand, France is insisting that Russia repay to the last centime the loans that France extended to her. The disposition of the inter-governmental loans depends upon many factors which will become clearer within the next few years.

(c) *Taxes*—

The relative amount of money raised by taxation during the war is of great significance, because it affords an opportunity to verify the opposed theories of war finance advocated by economists. The amount of money which the belligerents, except the United

States and Great Britain, raised by taxation for the payment of war expenses was very slight. The after-war condition of the finances of the belligerents vindicates the policy of very heavy war taxation and shows the financial peril which must result from financing chiefly by loans.

1. Ratio of taxes to expenditure—The ratio of total taxes to total expenditure was highest in the United States, followed in order by Great Britain, France, Italy, and Germany. If loans to the Allies are excluded as expenditures, the United States raised 36 per cent of the total expenditures by taxes. If, however, we deduct from the total taxes and total expenditures the amounts estimated for normal peace time the position of France would be last, and the relative position of the other countries would remain unchanged. France raised about 1 per cent of her war expenditures by war taxes.

2. Total taxes and war taxes per capita per annum—During the period of the war the total amount of taxes raised was largest in Great Britain, the other countries ranging in the following order: United States, Germany, France, and Italy. However, deducting the equivalent of peace-time taxes collected during the war, the surplus of war taxes proper were least in the case of France.

The per capita war taxes were highest in Great Britain and lowest in France. The war taxes per capita per annum were also highest in Great Britain and lowest in France.

Taxes Per Capita Per Annum [33]

Country	Period covered see p. 47 yrs.	mos.	Population (thousands)	Total taxes (millions)	Taxes per capita	Taxes per capita per annum	Total war taxes (millions)	War taxes per capita	War taxes per capita per annum
United States....	2	3	106,653	$8,400	$78.76	$35.00	$6900	$64.70	$28.75
Great Britain....	4	8	46,089	11,439	248.19	53.18	7730	167.72	35.94
France..........	4	5	39,700	3,998	100.70	22.79	21	0.53	0.12
Italy............	4	11	36,717	2,403	65.45	13.31	1059	28.84	5.87
Germany........	4	5	67,812	4,046	59.66	13.51	1713	25.26	5.72

[33] The term war taxes as used in this table refers to the surplus raised over the equivalent taxes of the last peace year.

SUMMARY OF EXPENDITURES AND RECEIPTS FROM TAXATION DURING THE WAR

(in million dollars)

Country	Period covered	Total revenue	Total expenditure	Loans to co-belligerents	Peace taxes during war period	Peace expenditures during war period
United States..	April 6, 1917 June 30, 1919	8,400	32,428	9102	1500	1641
Great Britain..	Aug. 1, 1914 Mar. 31, 1919	11,439	46,385	8464	3709	4484
France........	Aug. 1, 1914 Dec. 31, 1918	3,998	25,996	2413	3977	4319
Italy..........	Aug. 1, 1914 June 30, 1919	2,403	17,595	......	1344	2532
Germany......	Aug. 1, 1914 Dec. 31, 1918	4,046	36,795	2261	2333	2670

Country	War taxes *	War expenditures *	Ratio of Taxes to Expenditures			
			Total	Total excluding loans to allies	War Taxes to War Expenditures	
					Total	Excluding loans allies.
			per cent	*per cent*	*per cent*	*per cent*
United States......	6900	30,787	25.8	36.0	22 4	31.4
Great Britain......	7730	41,901	24.7	30.1	18.5	23.1
France............	21	21,677	15.4	17.0	1.0	1.1
Italy..............	1059	15,063	13.3	13.3	7.0	7.0
Germany..........	1713	34,125	10.9	11.7	5.0	5.4

* The terms war taxes and war expenditure as used in this table mean the surplus over peace figures. The war figures are obtained by deducting from the total figures the figures of the last peace year multiplied by the number of years of the war period.

The column "war taxes per capita per annum" indicates the fiscal effort of the five principal belligerents. It shows strikingly the failure of Germany, Italy, and particularly France, to increase revenue from taxation during the war. The relatively sound position of both the United States and Great Britain after the

war is due to the fiscal policy which is reflected in the high war taxes per capita per annum levied in these countries.

3. Sources of revenue and relative increases in taxes.

a. *Direct taxes to total taxes*—Before the war the ratio of direct taxes to total taxes was highest in Italy. Her leading allies ranked in the following order: Great Britain, France, and the United States. Other sources of revenue were customs duties and other indirect taxes. As a result of the development of the graded income tax and the excess-profits tax, the ratio of direct taxes to total taxes during the war rose to highest levels in Great Britain, followed by the United States, Italy, and France. In the last year cited in the table below the ratio was 67 per cent in the United States, and 74 per cent in Great Britain, but only 35 per cent in Italy and 32 per cent in France.

b. *Relative increase in direct taxes*—If the direct taxes for the last year of peace be taken as 100, the relative increase in direct taxation was greatest in the United States, followed by Great Britain and Italy. France developed her direct taxation least of the four countries. In the last year cited, as compared with the peace-year standard, direct taxes rose 49 times in the United States, 11 times in Great Britain, 3.3 times in Italy, and only 1.4 times in France.

c. *Relative increase in total receipts*—Although France and Italy have sources of revenue other than taxation, such as revenue from government monopolies and government enterprises, the revenue from these sources did not increase much, and in some cases not at all. Therefore, in the relative increase in total revenue the United States again showed the highest increase followed by Great Britain, Germany, Italy, and France. In the last year cited, as compared with the peace-year standard, total receipts rose 7.0 times in the United States, 4.5 times in Great Britain, 3.5 times in Germany, 2.5 times in Italy, and only 1.3 times in France.

d. *The ratio of total taxes to expenditures*—Before the war, taxes, direct and indirect, formed the principal source of revenue of the United States and Great Britain, but France, Germany and

Italy had other sources of national income. Because of the failure to increase taxes adequately, and because of the steady or declining amount of revenue from non-tax sources, the ratio of total taxes to expenditures declined to very low figures in France, Germany and Italy.

SOURCES OF REVENUE AND RELATIVE INCREASES IN TAXES AND REVENUE DURING THE WAR

United States (fiscal year ends June 30)	1916	July 1, '16–April 5, '17	April 6, '17–June 30, '17	1918	1919
Ratio of direct taxes to total taxes...	17.2	6.6	27.3	68.7	67.1
Ratio of taxes to expenditures.......	100.4	69.4	43.9	26.5	24.3
Relative direct taxes (1916 = 100)....	100	....	1038	3790	4950
Relative total revenue (1916 = 100)...	100	....	331	499	701

Great Britain (fiscal year ends Mar. 31)	1914	Aug. 1, '14–Mar. 31, '15	1916	1917	1918	1919
Ratio of direct taxes to total taxes...	31.0	44.8	45.5	67.8	75.5	73.9
Ratio of total taxes to expenditures...	82.7	29.2	18.7	23.5	22.7	30.4
Relative direct taxes (1914 = 100)....	100	193	261	692	915	1145
Relative total revenue (1914 = 100)...	100	130	170	289	357	448

France (year ending Dec. 31).........	1913	Aug. 1, '14–Dec. 31, '14	1915	1916	1917	1918
Ratio of direct taxes to total taxes...	29.1	35.6	27.9	24.2	26.2	32.3
Ratio of total taxes to expenditures...	92.1	17.8	16.0	15.2	15.2	15.0
Relative direct taxes (1913 = 100)....	100	74	75	79	107	140
Relative total receipts (1913 = 100)..	100	62	79	96	119	127

Italy (year ending June 30)...........	1914	1915	1916	1917	1918	1919
Ratio of direct taxes to total taxes...	41.2	46.0	44.4	45.5	51.1	35.4
Ratio of total taxes to expenditures...	52.7	25.5	16.6	14.3	12.6	11.4
Relative direct taxes (1914 = 100)....	100	109	134	197	279	336
Relative total receipts (1914 = 100)..	100	95	119	164	206	246

Germany (year ending Dec. 31).......	1913	1914	1915	1916	1917
Ratio of total taxes to expenditures...	81.8	27.8	6.9	7.5	16.2
Ratio of total revenues to expenditures	87.4	27.2	6.7	7.3	15.9
Relative total receipts (1913 = 100)...	100	106	78	92	353

(d) *The Increase in Note Circulation—*

The direct cost of the war cannot be measured exclusively in terms of loans and taxes. Another factor is the increase of note circulation, whether caused directly by the state itself by printing

fiat money, as in Russia or in England, or whether it is caused indirectly through the medium of the official bank, as in France, Germany and the other countries of Europe. The increase in the note circulation increases the floating debt of the state, which issues treasury bills in exchange for bank notes, and in addition leads to the depreciation of the currency. It is theft by the state. Capitalists and holders, through bonds, of the accumulated wealth of the country are subjected to a capital levy, as it were, the rate of which is equal to the depreciation of the purchasing power of money. The recipients of current wealth in fixed amounts, as in wages and in salaries, are robbed by the same process. An invisible income tax is placed upon them, and the rate is equal to the depreciation of the currency. Who gets the money? The owners of war industries, the stockholders or proprietors, retain the untaxed portion of profits, which is created by the insistent war-time demand for commodities. The nation as a whole is neither richer nor poorer as a result of the increase of note circulation, just as in the case of an increase in domestic debt. However, in both cases, the owners of war industries are enriched at the expense of the wage-earning, salaried, and bondholding classes.

The note circulation of the principal belligerents increased all the way from 3.5 times in the case of Japan to 47.0 times in the case of Russia during the war. Before the war, the per capita note circulation of the various countries ran in the following order: France, Belgium, Italy, Greece, Austria-Hungary, Germany, United States, Bulgaria, Great Britain, Russia and Japan. After the war, the series ran: Russia, France, Austria-Hungary, Germany, Belgium, Bulgaria, Italy, Greece, Great Britain, Turkey, United States, Japan. The rate of increase was greatest for Turkey, followed by Russia, Austria-Hungary, Germany, Bulgaria, Great Britain, Italy, Greece, France, United States, Belgium and Japan.

Such conclusions as may be drawn from these figures should take into account the financial habits of the people, the use of metallic or paper currency before the war, and the use of checks rather than either kind of currency.

This table covers the absolute increase in paper money as a factor in the direct cost of the war. It does not deal with the ratio of metal to paper, which will be treated in the section on currency and credit.

NOTE CIRCULATION OF PRINCIPAL BELLIGERENTS
(in million dollars)

Country	Before Entering War			At a Recent Date			Ratio 1919 to 1914
	Date	Note circulation		Date	Note circulation		
		Total	Dollars per capita		Total	Dollars per capita	
ALLIED POWERS:							
United States....	July 1, 1914	715	6.70	Oct. 1, 1919	3,523	33.03	4.92
Great Britain....	July 29, 1914	223	4.84	Oct. 15, 1919	2,333	50.62	10.45
France..........	July 30, 1914	1290	32.49	Oct. 16, 1919	7,102	178.89	5.51
Italy............	July 31, 1914	518	14.11	July 20, 1919	2,964	80.73	5.72
Japan...........	Aug. 31, 1914	163	2.81	Sept. 6, 1919	567	9.78	3.48
Russia...........	Aug. 4, 1914	842	4.62	Oct. 1, 1919	39,762	218.25	47.25
Belgium.........	Mar. 19, 1914	186	24.29	Oct. 9, 1919	906	118.31	4.86
Greece..........	July 31, 1914	46	9.29	Aug. 27, 1919	258	52.12	5.60
Total.........	....	3983	8.26	....	57,415	115.65	14.42
CENTRAL POWERS:							
Germany........	July 23, 1914	538	7.93	Sept. 15, 1919	10,066	148.44	18.65
Austria-Hungary.	July 23, 1914	432	8.25	Sept. 30, 1919	9,294	177.47	21.56
Turkey..........	July, 1914	9	0.42	April, 1919	704	33.09	78.22
Bulgaria.........	Sept., 1913	36	6.52	June 14, 1919	475	86.10	13.20
Total.........	....	1015	6.91	....	20,539	139.75	20.4
Grand total....	....	4998	7.95	....	77,954	121.16	15.6

iii. *Indirect Costs of the War*

The cost of the war cannot be reduced to terms of bonds, taxes and increase in the note circulation. Of the intangible items, no appraisal can be made. However, the economic items of cost would include the destruction of the accumulated wealth of the past, and the loss of current production. The indirect costs have been estimated [34] as equivalent to the direct costs. In other words, the total direct and indirect cost of the war would be about $370,000,000,000. Of course, this would rule out the mere transfer of territory, property, or reparation payments, which constitute a national loss but not a world loss.

(a) *Loss of Life—*

The loss of life in the World War is estimated to be 12,991,000. This figure includes the known dead and an estimated 50 per

[34] Edgar Crammond. The Cost of the War. Journal of the Royal Statistical Society, May, 1915, p. 398.

cent of those listed as prisoners or missing. The distribution by countries is given as follows by Bogart:

CASUALTIES OF THE WORLD WAR
(in thousands)

Country	Known dead	Seriously wounded	Otherwise wounded	Prisoners or missing
United States	107*	43	148	5
Great Britain	807	618	1,441	65
France	1428	700	2,344	454
Russia	2758	1000	3,950	2500
Italy	507	500	462	1359
Belgium	267	40	100	10
Serbia	707	322	28	100
Roumania	339	200	†	116
Greece	15	10	30	45
Portugal	4	5	12	......
Japan	......	†	1	......
Total Allied countries	6939	3438	8,516	4654
Germany	1611	1600	2,183	773
Austria-Hungary	911	850	2,150	443
Turkey	437	108	300	104
Bulgaria	101	300	852	11
Total Central Powers	3060	2858	5,486	1330
Grand total	9999	6296	14,002	5984

These figures agree substantially with those of the French War Office. Economiste Française, January 4, 1919, p. 9.

* Includes deaths in camps in United States and abroad. Actual casualties were about 58,000. Bogart, *idem*.

† Included in preceding column.

The loss of life during the Napoleonic Wars from 1792 to 1815 was about 2,000,000; during the American Civil War, about 700,000; and during the Balkan War, about 500,000. The total loss of life in wars of the nineteenth century was about 4,500,000. The known dead of the World War was five times that of the Napoleonic Wars, which lasted 23 years, and twice that of all the wars of the last century. Bogart translates the loss of life into monetary terms, using the estimates by several statisticians of the value of a human life. The values range from $400 up to $10,000 and by using an arithmetical average of seven estimates the figure

$45,899,000,000, is obtained as the capitalized value of the lives lost.

In addition to the deaths resulting from military operations, the decrease in births reduced the civilian population by 500,000 in the United Kingdom, 833,000 in the uninvaded district of France, 2,600,000 in Germany, and 2,600,000 in Austria-Hungary. To the loss of life must be added various degrees of incapacity on account of wounds or sickness, directly ascribable to the war, as trench fever, Spanish influenza, and tuberculosis. Again, as a result of famine and hardship, the vigor of the populations was reduced.

(b) *Loss of Property*—

The loss of property is as difficult to determine as the capitalized value of the loss of life. Estimates vary, depending upon the authority and whether they were made for the purpose of increasing the indemnity under the treaty or of obtaining credit for reconstruction. For instance, the property losses in Belgium have been figured to be from $6,750,000,000 to $8,000,000,000. Bogart accepts the figure $7,000,000,000. The official appraisal of Belgium wealth, published in 1913 by the Finance Minister of Belgium was $5,905,000,000. J. C. Stamp has revised this figure upward and takes $7,500,000,000 to be a liberal estimate. On either of these bases, the claims at the peace table and the Bogart figures are obviously too high. Keynes estimates as a maximum a physical loss of $750,000,000 and levies and requisitions of $500,000,000.[35]

The estimates of property loss in France submitted at the Peace Conference were similarly overrated. M. Loucheur, Minister of Industrial Reconstruction, estimated that the cost of rehabilitation of the devastated areas would be about $15,000,000,000. M. Dubois, of the Budget Commission of the Chamber of Deputies, set $13,000,000,000 as a minimum, excluding war levies, losses at sea, loss of public monuments and roads. M. Klotz, Minister of Finance, estimated the total French claims for damage to property at $26,800,000,000. On the other hand, René Pupin estimates the property losses of the invaded regions at $2,000,000,000 to $3,000,000,000. J. M. Keynes, representative of the British

[35] Keynes, J. M., Economic Consequences of the Peace, 1920. Pp. 124, 127.

Treasury at the Peace Conference, independently estimated the loss to be $2,500,000,000, about one-sixth of M. Loucheur's figures and less than one-tenth of M. Klotz' figures.[36]

Bogart summarizes the total property loss at $29,960,000,000, which probably is 50 to 75 per cent too high an estimate.

The total loss of tonnage, according to Bogart, was 15,398,000 gross tons, of a value of about $3,000,000,000. (Lloyd's Register of Shipping gives figures as 14,224,000 gross tons.) At a pre-war valuation of cargo at $250 per ton, the total cargo loss would be $3,800,000,000. Total losses at sea therefore would equal $6,800,000,000.

(c) *War Relief*—

The total collections for war relief are not available. However, Bogart gives the following figures: $625,000,000 in the United States, about $92,000,000 in Canada, about $87,000,000 in Great Britain, and $69,000,000 in the British Colonies. The total of the known figures is $873,000,000 and the probable total for the entire world is probably over $1,000,000,000.

(d) *Losses of Neutrals*—

As a result of the war, the neutrals were subject to immeasurable hardship, which cannot be reduced to monetary terms. Directly, the cost of the war to them included the expense of mobilization and other outlays incidental to the war. According to Bogart, these costs were as follows: Netherlands, $672,000,000; Switzerland, $250,000,000; Sweden, $430,000,000; Norway, $130,000,000; Denmark, $90,000,000. The total cost of the war to neutrals, including an estimated allowance of $200,000,000 for those not mentioned above, would be about $1,750,000,000.

(e) *Loss of Current Wealth*—

This item is practically impossible to determine. The diversion of natural resources to war, the changes in trade routes, the shutting off of sources of income, the increased expenditure of human effort, and the decrease in consumption, cannot be estimated. Bogart assumes that 20,000,000 men were withdrawn from industry for 4½ years. Allowing an average productive capacity of $500 per year, the total loss of production would be $45,000,000,000.

[36] Keynes, *ibid.*

However, this estimate does not take account of the increase in production due to the removal of the restrictions on output during the war, the replacement of men by women in industry, and the vastly greater production of goods during the war than either before or after the war.

(f) *Social Unrest*—

An important element in the cost of the war is the loss of production following its close. The productivity of mines, fields and factories declined not only below the war-time levels but even below the pre-war levels. And the end is not yet. The intangible cost of the readjustment to some sort of stable conditions after the war is an indirect cost of the war.

(g) *Total Indirect Costs*—

Excluding the last item, Bogart summarizes the indirect costs as follows:

Capitalized value of human life:	(In millions)
Soldiers	$33,500
Civilians	33,500
Property losses:	
Land	30,000
Shipping and cargo	6,800
Loss of production	45,000
War relief	1,000
Loss to neutrals	1,700
Total indirect costs	151,500

Except for the three minor items, loss to neutrals, war relief, and loss of shipping and cargo, these items are subject to a possible reduction of about 50 per cent.

(h) *Compensation*—

The offsets to the direct and indirect costs of the war are both economic and political. Some of the expenditures were incurred for productive ends, as the building of plants, railroads, ports and ships, which would have been built in the normal course of development. Again, some of the costs are apparent rather than real, such as the provisioning of the military and civilian population by the state instead of from private funds. The average

increase in the index numbers of wholesale prices during the period 1914–18 was more than 100 per cent over the 1913 figures, so that the total cost of the war would have to be reduced by 50 per cent to obtain a pre-war valuation. The ultimate conversion of the debt and the reduction of the rate of interest may reduce the money cost considerably.

In addition to these offsets, there are positive economic gains. The war stimulated large-scale production, the use of automatic machinery, the development of efficient methods of industrial organization. New processes were developed, like the Haber method of making artificial nitrates. Some substitutes were developed whose production may become profitable if prices of the original article in use should rise. The war thus developed potential restraints on high prices of some commodities. In commerce, new and more efficient methods of international distribution of commodities were made practicable during the war and may remain permanently after the war.

In the larger sense, the war must be regarded merely as an incident in the development of the human race. All our political and social gains in the past have been achieved at a price. Some ambitious sociologists and statisticians have attempted to estimate the money cost of progress and to compute in terms of lives the cost of social gains like those resulting from the French Revolution. The per capita cost of the Russian Revolution, it is said, is less than that of the French Revolution. However, should the League of Nations be tested, the world at large will adopt the Anglo-Saxon method of achieving progress, by counting heads instead of breaking them. When the world at large will be able to compel social change without violence, the cost of progress in terms of lives will be greatly reduced. If the World War results in an effective and just League of Nations, perhaps the gigantic cost will be more than compensated by the infinite gains in the method of social development.

CHAPTER II

BRITISH PUBLIC FINANCE[1]

A. Pre-War Situation and Cost of the War

After the Napoleonic Wars, the British debt was reduced out of the occasional annual surplus of budget revenue instead of by payments into a fictitious annual sinking fund. The interest rates on the outstanding debt were lowered by successive conversions of

[1] Material in this chapter is based on the following sources:

Official sources:

Finance accounts of the United Kingdom. (Annual in Sessional papers.)
Statements relative to the national debt. (Annual in Sessional papers.)
Statements of revenue and expenditures as laid before the House by the Chancellor of the Exchequer when opening the budget. (Annual in Sessional papers.)
Votes of credit. (Annual in Sessional papers.)
Reports of the Committee on currency and foreign exchanges after the war. (Lord Cunliffe, Chairman.) Interim report, 1918. Final report, 1919. (This and other special financial reports may be found in Sessional papers.)
Hansard's Parliamentary Debates (speeches of Chancellors of the Exchequer, Lloyd George, 1914-15; McKenna, 1915-16; Bonar Law, 1917-18; Austen Chamberlain, 1919—)
Report of the Commissioners of internal revenue. (Annual in Sessional papers.)
Report from the Committee of Public Accounts.
Return Relating to Imperial Revenue (Collection and Expenditure). (Annual in Sessional papers.)
Account of the Public Income and Expenditure. (Annual in Sessional papers.)
National Debt and Assets. (Annual in Sessional papers.)
Inland Revenue. (Annual in Sessional papers.)

Semi-official sources:

Journal of the Royal Statistical Society.
Economist. (London.)
Statist.
Bankers' Magazine. (London.)
Stock Exchange Official Intelligence.
Stock Exchange Yearbook.

portions of the debt from 5 per cent to 3½ per cent in the period 1822-1834, and to 3 per cent by 1853. As a result of the Crimean War, the anticipated reduction of interest rates to 2½ per cent was not accomplished. In 1875, the government made provision for definite sinking fund instalments instead of utilizing chance budget surpluses to redeem the debt. Under this scheme, large reductions were made in the first decade in the twentieth century. To convert all the 3 per cent loans, a new stock was issued in 1888 to yield 2¾ per cent until 1903 and 2½ per cent thereafter for twenty years.

The great increases in debt were due to wars. The Napoleonic Wars added 613 millions sterling to the debt and hardly 59 millions were paid off before the Crimean War. The latter added another 35 millions which was paid off in the following twelve years of peace. The Boer War added 163 millions sterling to the debt and only 90 millions was paid off at the outbreak of the World War. The great increase in the recent years before the war in the civil budget, covering extensions of social legislation, interfered with the rapid reduction of the debt. In spite of the criticism of students of public finance and of statesmen of Great Britain, her debt was handled with greater skill than the debts of the Con-

For collateral reading:

Bogart, E. L., Direct and Indirect Costs of the World War. New York: Oxford University Press, 1919.

Kirkaldy, A. W., Labor, Finance and the War. London: Sir Isaac Pitman and Sons, Ltd., 1916.

Kirkaldy, A. W., Industry and Finance. London: Sir Isaac Pitman and Sons, Ltd., 1917.

Laughlin, J. Laurence, Credit of the Nations. New York: Charles Scribner's Sons, 1919.

International War Loans of the Belligerent Countries. New York: National City Company, 1918.

Seligman, E. R. A., The Cost of the War and How it Was Met. American Economic Review, ix. 4; 739-770, December, 1919.

Gottlieb, L. R., Indebtedness of Principal Belligerents. Quarterly Journal of Economics, xxxiii, 3: 504-531, May, 1919.

Debts, Revenues and Expenditures and Note Circulation of the Principal Belligerents. Quarterly Journal of Economics, xxxiv, 1: 161-205, November, 1919.

Les Finances d'Après Guerre, Revue de Science et de Legislation Financières, October, 1920; xviii, 4: 613-713.

Jèze, Gaston wrote a series of articles during the war in this magazine covering official data on war finances.

Snodgrass, K. H., British Finance During the War. Federal Reserve Bulletin, May, 1921, pp. 563-572.

tinental countries. In the 99 years between the end of the Napoleonic Wars and the beginning of the World War, the debt had been reduced from 861 millions to 708 millions sterling, or by 18 per cent, and the annual charges from 32.6 millions to 24.5 millions or by 35 per cent.

An important characteristic of British financing of the war was the high and increasing ratio of total revenue to total expenditure. As the war progressed, an increasing portion of the war burden was borne by taxation. In the fiscal year 1916, revenue was about 21 per cent of expenditure and in 1919 about 33 per cent. The following table illustrates these facts:

RATIO OF REVENUE TO EXPENDITURES

(in millions sterling)

Fiscal year	Expenditures Amount	Revenues		Loans Amount
		Amount	Per cent of Expenditures	
1912–13	188.6	188.8	100.1	
1914–15	560	226	44.3	334
1915–16	1569	336	21.4	1233
1916–17	2198	573	26.1	1625
1917–18	2696	707	26.3	1989
1918–19	2579	889	33.2	1690
Total war years.....	9592	2731	28.4	6862
Less 5 normal years..	943	944	100.1	
Net war total.......	8649	1787	20.7	
1919–20	1665	1339	80.4	326
1920–21	1184	1418*	119.5	234*

* The returns for 1920–21 almost yielded the surplus of about 234 millions sterling estimated.

As the war progressed Britain raised increasing funds through taxation. A vigorous tax policy in turn strengthened British credit during the war.

B. Loans

A classification of the forms of the public debt of Great Britain from 1914 to 1919 indicates several pronounced tendencies. As the war dragged on, loans from new sources increased so that in the fiscal year ending March 31, 1919, about 28 per cent of the outstanding public debt was obtained from sources not used before the war. The drain on the old sources of public credit compelled a shift to new sources. Furthermore, in the early stages of the war, short-term loans constituted the chief reliance of the treasury; but in the later stages of the war long-term loans were more extensively used. After America entered into the war, Britain had less need to resort to short-term domestic borrowing, as the United States government advances then became available.

The following table shows the above mentioned facts:

Outstanding Public Debt of Great Britain Classified at Given Dates*
(in million pounds)

	Aug. 1, 1914	Mar. 31, 1915	Mar. 31, 1916	Mar. 31, 1917	Mar. 31, 1918	Mar. 31, 1919	Increase 1919 over 1914
Old sources:							
Long term.....	616.3	960.4	1307.4	2386.9	3134.7	4104.4	3488.1
Short term....	37.0	144.6	743.8	784.0	1365.1	1349.6	1312.6
Total old sources....	653.3	1105.0	2051.2	3170.9	4499.8	5454.0	4800.7
New sources:							
Long term.....	.....	.....	62.0	466.0	1148.9	1614.5	1614.5
Short term....	.....	.....	19.9	217.5	192.3	456.5	456.5
Total new sources....	.....	.....	81.9	683.5	1341.2	2071.0	2071.0
Grand total all sources......	653.3	1105.0	2133.1	3854.4	5841.0	7525.0	6871.7

*Later figures are given weekly in the London Economist.

The significance of these figures becomes more obvious when the table is given on a percentage basis:

Of the total increase in the public debt, about 70 per cent was obtained from old sources and about 30 per cent from new sources;

about 75 per cent was in long-term loans and about 25 per cent in short-term loans.

	Aug. 1, 1914, per cent	Mar. 31, 1915, per cent	Mar. 31, 1916, per cent	Mar. 31, 1917, per cent	Mar. 31, 1918, per cent	Mar. 31, 1919, per cent	Increase 1919 over 1914, per cent
Old sources:							
Long term.....	94.3	86.9	61.4	61.9	53.7	54.5	50.8
Short term....	5.7	13.1	34.8	20.3	23.3	17.9	19.1
New sources.							
Long term.....	0.0	0.0	2.9	12.1	19.7	21.5	23.5
Short term....	0.0	0.0	0.9	5.7	3.3	6.1	6.6
Total from—							
Old sources....	100.0	100.0	96.2	82.2	77.0	72.4	69.9
New sources...	0.0	0.0	3.8	17.8	23.0	27.6	30.1
Total in—							
Long term.....	94.3	86.9	64.3	74.0	73.4	76.0	74.3
Short term....	5.7	13.1	35.7	26.0	26.6	24.0	25.7

The total debt outstanding on November 30, 1920, was £7735.6 millions equivalent to $37,620 millions at parity. In reply to an interpellation in the House of Commons, the Chancellor of the Exchequer gave the details of the national debt as follows:[1]

Form of debt	Amount in millions sterling
Funded debt (2½ per cent. consols, etc.)	315.0
Terminable annuities	18.5
3½-per cent. war loan, 1925–1928	62.7
4½-per cent. war loan, 1925–1945	12.8
5-per cent. war loan, 1929–1947	1949.3
4-per cent. war loan, 1929–1942	67.2
4-per cent. funding loan, 1960–90	407.0
4-per cent. Victory bonds	357.7
Exchequer bonds, 1920, 1921, 1922, 1925, and 1930	315.0
4- and 5-per cent. national war bonds	1441.0
Treasury bonds, 5–15 year	13.8
Treasury bills	1111.5
Ways and means advances	222.6
National savings certificates	277.9
Other debt (chiefly foreign debt)	1163.5
Total	7735.6

[1] House of Commons debates, Dec. 9, 1920 and Dec. 16, 1919. See also statement of National Debt and Assets, Mar. 31, 1920. (Cmd. 780.)

The distribution of the debt by maturities is given elsewhere in this chapter.

i. *Ways and Means Advances*

The net increase in Ways and Means Advances from August 1, 1914, to March 31, 1919, was £455,500,000. The net advances each year were as follows:

Fiscal year	Millions sterling
1915–16	18.9
1916–17	197.6
1917–18	25.2*
1918–19	264.2
Total......	455.5

* Decrease for the year.

Ways and Means advances were credits on the books of the Bank of England. They were used when credit was needed promptly, and were retired when treasury bills were issued or when war loans were floated.

ii. *Treasury Bills*

The treasury bill was utilized as a fiscal device in Great Britain and at the declaration of war there were about £10,000,000 of treasury bills outstanding. The old pre-war system of tendering for bills was discontinued and in its place rates of discount were adjusted to produce the supply of short-term funds needed by the government. Treasury bills ran for three, six, nine and twelve months, and were discounted by the Bank of England and the joint-stock banks. Before the war, banks were the chief purchasers. During the war private investors bought them extensively.

As the war continued, increasing amounts of treasury bills were issued so that in September, 1918, about £1,000,000,000 were outstanding. As the outstanding amounts increased, the volume became unmanageable and interest rates rose; and as a measure of expediency successive war loans were issued to reduce the volume of treasury bills.

The floating of long-term loans was rendered necessary because of the fact that the rates on treasury bills had increased so as to make the long-term loan the more economical and less unmanageable form. Treasury bills were accepted in payment of war loans so that for example between December of 1916 and April, 1917, there was a reduction of over £600,000,000 in treasury bills, of which about £130,000,000 was used for subscription to the loan. The sale of treasury bills, which had been discontinued in 1916, was resumed in March of 1917 on the old prewar system of tender. During the fiscal year 1917-18, treasury bills were used extensively; about £500,000,000 net were issued. In the fiscal year 1919, there was a net decrease in the amount of treasury bills outstanding.

To the investor, the advantage of treasury bills lay in the fact that they were a convenient investment for temporarily idle funds. Their liquid character made them practically the equivalent of cash. To the Government, the treasury bill was a quick means of securing funds. On the other hand, the disadvantage of treasury bills was that they matured at short intervals and constituted a serious refunding problem when the volume outstanding became very great.

The net issue of treasury bills was as follows:

Fiscal year ending March 31	Millions sterling (increase)
1915	61.7
1916	489.6
1917	103.1 *decrease*
1918	509.7
1919	16.4 *decrease*
Total......	941.5

The decreases in 1917 and 1919 were due to the fact that more bills were retired than were issued. In 1919 the Drummond-Fraser plan of continuous borrowing made it unnecessary to resort to treasury bills.

War expenditure certificates were treasury bills running for two years. They were issued in 1917 to the extent of about £23,-600,000, but were completely retired in the following two years.

iii. *Exchequer Bonds*

Like treasury bills, exchequer bonds were a tested fiscal device before the World War. They had been used during the Crimean War and the Boer War. The bonds were issued as follows:

Fiscal year ending March 31	Millions sterling
1915	46.9
1916	109.6
1917	143.3
1918	71.4
1919	0.9
Total......	372.1

The issue of 1915 had been put out at 3 per cent, but during 1916, the rate was raised to 5 per cent, and subsequently to 6 per cent. The terms ran from three to five years. The increase in rate was intended to deflect new money from the short-term treasury bills into the longer-term exchequer bonds. Indeed, the rates on treasury bills in 1916 were reduced for this reason. Furthermore, the high interest rate on exchequer bonds was designed to attract foreign capital and thus to stabilize exchange. As an inducement to subscribe to exchequer bonds, they were made receivable at their nominal value in payment of excess-profits taxes and of inheritance taxes. Furthermore, they were receivable at their face value as cash for subscription to war loans. During the fiscal years 1918 and 1919, when the plan of continuous day-to-day borrowing was practiced, exchequer bonds were issued to a less extent than during the earlier years of the war.

iv. *Long-Term Bonds*

Great Britain issued six war loans. The first loan was issued at 95 and bore 3½ per cent interest. It was dated March 1, 1915, was redeemable in 1925 and matured in 1928. The amount raised was £340,600,000.

The second war loan was issued at par, bore 4½ per cent interest, was dated June 1, 1915, was redeemable in 1925 and due in 1945. The amount raised was £576,600,000.

The third war loan was issued in two forms. The taxable bonds were issued at 95, with 5 per cent interest rate, dated June 1, 1917, redeemable in 1929, and due in 1947. The tax-exempt bonds were issued at par, bore 4 per cent interest, and matured in 1942. The cash raised was £962,200,000, most of which was in the taxable form.

The fourth war loan was also issued in both tax-free and a taxable form. The tax-free bonds were sold at par, bore 4 per cent interest, and matured in 1927. The taxable bonds were sold at par, bore 5 per cent interest, and matured in five, seven, and ten years. They were issued continuously after October 1, 1917, under the Drummond-Fraser plan of day-to-day borrowing.

The 1918-19 National War Bonds were also sold continuously under the Drummond-Fraser plan, the advantages of which were that interest was saved on idle borrowed funds and that subscriptions were stimulated out of savings rather than out of borrowings at the banks.

The sixth war loan was issued on February 1, 1919. Again, there were two forms, a 5 per cent taxable bond and a 4 per cent tax-exempt bond. The issue and redemption prices were the same as on the former loan, which were redeemable at a slight premium above par.

The seventh war loan of 5-15 year treasury bonds was issued in the spring of 1920 for the sole purpose of repaying the floating debt consisting of treasury bills and Ways and Means advances of the Bank of England. The treasury bonds were issued continuously under the Drummond-Fraser plan, and in order to fund the floating debt the new bonds were to pay a rate of interest 1 per cent higher than the annual average treasury bill when the average rate was from 5½ to 6½ per cent, and 2 per cent higher when the average rate was 6½ per cent or over. After 1925, the rate of 5 per cent goes into effect and holders may demand repayment at par upon one year's notice. The bonds are due in 1935 and redeemable by the government after 1925 upon specified notice.

Aside from the perpetual debt and the 4 per cent loan maturing 1960 to 1990, maturities of the British war bonds range up to 1947.

The national debt reached a high figure of £8079 million on January 1, 1920, and was reduced by £237 million during the calendar year to £7842 million. The budget for the fiscal year

ending March 31, 1921, had a surplus of £230 million which was applied to the further reduction of the debt. About £30 million of long-term bonds were retired out of the statutory sinking fund.

(a) *Inducements to Subscribe*—

Subscribers to the first loan had the privilege for three years of borrowing at the Bank of England up to the issue price of the bonds. In the second loan, payments were accepted in 3½ per cent consols at 66⅔, slightly above the then existing market price. Furthermore, holders of the second loan had the right to convert into future loans, issued at a higher rate. Subscribers to the third loan were offered a choice of a taxable or a tax-exempt bond. Holders of the fourth war loan had the privilege of converting their bonds into the third war-loan bonds. As a further inducement to subscribe, in connection with the third war loan one-eighth of one per cent a month was set aside to maintain the market price of the bonds. Finally, most of the war loans of Great Britain were issued below par, the total loans of about £5,200,000,000 par value being issued at an average price of 96.45, and the National War bonds being payable at a premium of two, three, and five points, depending upon the term of the bond.

(b) *Control of Capital Issues*—

1. PROCEDURE—The control of new issues of capital by the British government under conditions accepted by the stock exchanges in the United Kingdom, began when the London Stock Exchange was reopened in January, 1915. By the terms of this agreement the Committee of the Stock Exchange bound the members, under penalty of expulsion, to certain regulations approved by the British Treasury. Under the regulations affecting new issues of capital, no dealings were to be allowed on the stock exchanges in any new securities unless the issue had been first approved by the Treasury.

The procedure adopted by the committee was to deal with the cases involving smaller amounts in summary fashion and to refuse applications for new issues unless a good case had been made out, either (a) that the new issue was essential to the prosecution of the war or (b) that the refusal to approve the new issue would involve a heavy or an entire loss of previously expended capital. After a transition period covering the year 1915, no new issues

of any sort except for renewal purposes were approved unless they were essential for the prosecution of the war. With regard to the question of capital expenditures or borrowings by the local or municipal authorities in Great Britain, it was urged upon the officials to preserve capital and labor in the country for the prosecution of the war and to defer capital expenditure.[3]

2. EFFECTS—The effect of these restrictions was to curtail very greatly the total volume of capital issues. Taking the total for the year 1913 as a base of 100 the issues in 1915 were 34 per cent, in 1916 14 per cent, in 1917 11 per cent, and in 1918 27 per cent. That is in four years, 1915 through 1918, the total new securities issued were only 86 per cent of the issues in the single year 1913. The restrictions on issues during the war resulted in very large issues after the war. The issue of new securities in Great Britain since 1911 is given herewith. British government loans are excluded.

NEW CAPITAL ISSUED BY YEARS [4]

Year	In million pounds	Relative figures, 1913 figures as 100
1911	192	79
1912	207	86
1913	242	100
1914	200	82
1915	83	34
1916	35	14
1917	26	11
1918	65	27
1919	238	98
1920	384	159

[3] Memorandum of Basil P. Blackett, Esq., Secretary of the Capital Issues Committee of Great Britain (subsequently financial advisor of the British Embassy), addressed to James F. Curtis, Secretary of the New York Federal Reserve Bank, Aug. 6, 1917. This was submitted in the testimony of Vice-governor Warburg in the hearings before the Senate Committee on Finance, Feb. 8, 1918, on S. 3714, "A Bill to Create a War Finance Corporation." Submitted also before the Committee on Ways and Means of the House, Feb. 19, 1918, on H. R. 9499.

[4] London Joint City and Midland Bank Circular, January, 1921.

For detail classification see article, Capital Issues in 1920. Statist, January 8, 1921, p. 50.

v. *War Savings Certificates*

These were issued for the small investors through thousands of associations, formed to encourage purchase on the installment plan. The total amount sold, chiefly during the latter part of the war, was over two hundred millions sterling. They were tax exempt and were issued in several denominations.

vi. *Foreign Borrowings*

The course of British public finance was from short-term to long-term loans, both domestic. When the demand for goods outran the supply of domestic credit, Britain turned to the United States and with difficulty raised in the open market an unsecured loan. Subsequently, loans secured by collateral were sold to private investors and finally, when the United States entered the war, government credits were advanced by the United States to her allies.

(a) *Unsecured Loans*—

In conjunction with France, Great Britain proposed to float a $1,000,000,000 bond issue in the United States. The unfamiliarity with foreign securities on the part of the American investor led the mission which arranged the loan to reduce the amount to $500,000,000. The loan was dated October 15, 1915, and was due October 15, 1920. It was issued at 98 and bore 5 per cent interest. A syndicate of 288 financial institutions underwrote the issue. This was an unsecured loan, the largest foreign loan ever placed in the United States, and the largest single issue since the Civil War, and therefore not a complete success.

The British Government also raised an unsecured three-year loan in Japan in December, 1916, equivalent to £10,000,000 at 6 per cent. The proceeds of the loan were devoted to the purchase of dollar balances in America which were held on Japanese account.

(b) *Treasury Bills*—

By means of treasury bills, funds can be obtained without the elaborate preparations that precede the floating of a long-term loan. After the war had been waged for two years, it became increasingly difficult to secure credit in Great Britain for the purchase of

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supplies in the United States. Two secured loans had been placed since the unsecured loan of October, 1915. Further credits were needed, and for this purpose British treasury bills were placed in the United States. In November, 1916, the Federal Reserve Board cautioned its member banks against locking up their funds in obligations of foreign governments which were short-term in form, but either by contract or force of circumstances might have to be renewed continually and thus constitute, in reality, a long-term obligation. After the United States entered the war, military considerations outweighed banking expediency. On August 1, 1917, the British government, through J. P. Morgan & Company, its fiscal agents, floated 60 and 90 day dollar treasury bills in the New York markets. Up to November 11, 1918, the date of the armistice, the maximum outstanding amounted to $84,405,000. The rate rose from 5 per cent to 6 per cent.

(c) *Mobilization of Securities*—

The mobilization of American securities held in Great Britain was effected for the purpose of stabilizing foreign exchange rates. In 1915 insurance and trust companies in Great Britain were requested to sell or lend specified American securities to the Treasury.

"A scheme setting forth the conditions under which the securities would be purchased or accepted on loan was published.

"1. PURCHASE—The Treasury undertook to purchase any suitable dollar securities, at prices based on current New York Stock Exchange quotations, the sterling price to be paid being calculated at the exchange of the day; in the case of no reliable quotation being available, the price was to be fixed by agreement.

"2. DEPOSIT ON LOAN—Securities loaned to the Treasury were to be accepted for two years from the date of deposit, on the understanding that the interest received on such securities would be paid to the depositor together with an additional payment at the rate of one-half of one per cent per annum on the nominal amount of the security. . . . Owners had the option to release securities so deposited or they could be sold on behalf of the depositor, the understanding in each case being that the equivalent value in sterling at the exchange of the day should be paid in London." [4a]

[4a] Report of the American Dollar Securities Committee, Nov. 20, 1919, submitted to the House of Commons.

The appeal to the holders did not produce American securities in sufficient volume, and the Treasury thereupon resorted to coercion and in May, 1916, levied a special tax of 10 per cent on the income derived from all issues which were eligible for purchase or loans, and which were not surrendered. As the depreciation of exchange became increasingly difficult to check, further coercion was resorted to and the British Treasury was empowered to commandeer eligible securities and to place restrictions upon holders. Upon relinquishing control of dollar securities in April, 1919, more than 1,800 issues of stocks and bonds of American origin had been surrendered. If sterling, franc, krone, and florin bonds be included, the total number of securities was 2027.

The aggregate of all securities mobilized was £622,595,000, of which £216,644,000, or about 35 per cent, were purchased, and £405,951,000, about 65 per cent, were loaned. The American securities mobilized totaled £250,543,000, of which £177,614,000, or 70 per cent, were purchased by the Treasury and £72,929,000, or 30 per cent, were loaned to the Treasury. The American securities mobilized were 40 per cent of the total amount. Of the loaned securities, the American were about 18 per cent in amount. Of the purchased securities, the American were about 82 per cent in amount.

(d) *Secured Loans*—

As a result of the mobilization of securities, Great Britain floated a loan for $250,000,000, secured by collateral valued at about $300,000,000, dated September 1, 1916, and maturing September 1, 1918. The bonds bore 5 per cent interest, were underwritten at 98, and sold at 99. The loan was a success. At maturity it was paid off from the proceeds of the sale of the collateral.

In October, 1916, a second loan secured by collateral was placed in the United States. The par amount of the loan was $300,000,000, and it was dated November 1, 1916. One-half of the loan was in the form of three-year notes, and the other half in the form of five-year notes. The prices were 99¼ and 98½ respectively, and the rate of interest 5½ per cent. The half of the loan maturing in 1919 was refunded by the issue of $250,000,000 of 5½ per cent three-year notes and ten-year bonds, offered at 98 and 96¼ respectively, and both convertible into national 5 per cent War Bonds at a rate of exchange fixed at $4.30. The half maturing in 1921 was paid off.

The last of the series of loans raised by Great Britain in the United States during the period of American neutrality was floated on February 1, 1917. American and foreign securities constituted the collateral. The total issue amounted to $250,000,000, divided into $100,000,000 of one-year notes and $150,000,000 of two-year notes. The rate of interest was 5½ per cent, and the issue prices were 99.52 and 99.07 respectively. The notes were convertible at the option of the holder into 5½ per cent bonds of the United Kingdom, due in 1937. The $100,000,000 due in 1918 was paid off, and $143,587,000, practically the balance of the issue, was converted.

The total amount of British loans sold privately in the United States was $1,050,000,000.

(e) *The Financial Impasse*—

By the spring of 1917, the burdens on the British Treasury were becoming difficult to bear. During the fiscal year ending March 31, 1917, the treasury bills floated amounted to about £1,790,000,000, as compared with about £500,000,000 during the previous fiscal year and a similar amount for the following fiscal year. Britain was finding the task of financing herself and her allies from domestic credit sources almost impossible. It was becoming increasingly difficult and dangerous to British bank credit to export gold. Unsecured loans in the United States were not popular, and securities to be used as collateral were limited.

The seriousness of the situation is described by J. M. Keynes, representative of the British Treasury at the Peace Conference:

"The financial history of the six months from the end of the summer, 1916, up to the entry of the United States in the war in April, 1917, remains to be written. Very few persons, outside the half dozen officials of the British Treasury who lived in daily contact with the immense anxieties of impossible financial requirements of those days, can fully realize what steadfastness and courage were needed, and how entirely hopeless the task would soon have become without the assistance of the United States Treasury." [4b]

(f) *United States Government Advances*—

Upon the entrance of the United States into the war, Great Britain's financial problem of finding credits for herself and her

[4b] The Economic Consequences of the Peace, footnote on p. 273, American Edition.

allies was solved. The United States extended credits to Great Britain, and through her as well as directly made advances to the Allies.

The first advance made by the United States to Great Britain on April 25, 1917, amounted to $200,000,000. The rate of interest was 3 per cent per annum until June 30, 1917, and 3½ per cent thereafter until such time as the United States had to pay a higher rate to her own bondholders.

Up to June 15, 1920, the United States government advanced to Great Britain about $4,277,000,000, which was about 45 per cent of the total cash advances made to foreign governments by the United States, and about 12 per cent of the total indebtedness of Great Britain at the end of the war.

(g) *Loans to Allies and Dominions*—

The loans to the British dominions and to Britain's allies offset the British borrowings in the United States. As of March 31, 1920, the total British loans amounted to about £1,850,000,000, or about 22 per cent of the total borrowings, domestic and foreign.

GREAT BRITAIN'S LOANS TO ALLIES AND DOMINIONS [6]

Loans to Allies to March 31, 1920	In million pounds	Per cent of total
Russia	568.0	30.6
France	514.8	27.9
Italy	455.5	24.6
Belgium	97.3	5.3
Serbia	20.9	1.1
Rumania and others	66.6	3.6
Relief loans	8.0	0.4
Total	1731.1	93.5
Loans to Dominions		
Australia	51.6	2.8
New Zealand	29.6	1.6
Canada	19.4	1.0
South Africa	15.8	0.9
Other dependencies	3.1	0.2
Total	119.5	6.5
Grand total	1850.6	100.0

[6] Budget speech of Austen Chamberlain.

The Chancellor of the Exchequer estimated that in normal years the British government's receipts from interest on its loans will balance the interest on its borrowings from the United States government. But as a matter of fact the loans to Dominions and Allies are being carried at 50 per cent of their face value. Even at that figure, it is doubtful whether the loans and borrowings of Great Britain will offset each other, either in the payment of interest, or in the re-payment of the principal.

(h) *Total Foreign Borrowings*—

On March 31, 1919, the British foreign debt was £1,364,-850,000 and by March 31, 1920, it had been reduced to £1,278,-714,000. Advances by the United States government, equivalent to about £880 million, constituted the largest item in the British foreign debt; private borrowings in the United States ranked next, and borrowings in Canada ranked third. Like her investments, British borrowings were world-wide—in Europe, North and South America, Asia and the islands of the Pacific. During the year the reduction of £86 million resulted from the repayment of the British share of the Anglo-French loan, and part of the £150 million advances by Canadian banks. Payments were also made to Norway, Sweden, Switzerland and Holland.

EXTERNAL DEBT OF GREAT BRITAIN [6]
(in millions sterling)

Countries	Maturity	Amounts
United States	Sundry	1046.8
Canada	Sundry	73.4
Japan	Sundry	7.2
Argentina	1921	19.2
Uruguay	1921	6.0
Netherlands	1920	0.7
Sweden	1921	0.8
Spain	1928	2.5
Fiji	1920	0.4
Straits Settlements	Sundry	7.7
Mauritius	1922	0.5
Sundry Allies	....	113.5
Total	....	1278.7

[6] House of Commons Paper, 144. Returns of the external debt as of March 31, 1919, and 1920, showing the external debt, the due date and the arrangements for repayment. H. M. Stationery Office, August, 1920.

C. Taxes

(i) *The Taxation Policy*—

In general, the taxation policy of Great Britain during the war was greatly to increase her direct taxes and to rely on a limited number of sources of revenue. The British tax policy was not the result of experimentation in a wide field, such as prevailed on the Continent. The exception to this principle was the development of the munitions-profits tax and the excess-profits tax. In the fiscal year 1914, the income tax, the chief direct tax, produced about 24 per cent of the total tax revenue, in 1916 about 38 per cent. After the fiscal year 1917, the two direct taxes, the income tax and excess-profits tax, produced over 60 per cent of the total revenue from taxation, direct or indirect. The non-tax revenues declined, as might have been expected. They were not capable of expansion *pari passu* with the tax revenues. The slogan, "Business as Usual," prevalent in England during the early part of the war, made it difficult to curb civilian consumption by restrictive taxation. Luxury taxes were introduced late in the war.

Britain's tax policy reflects sound economic thinking. The total revenue in 1919 was 4.5 times as great as in 1914.

The tax revenue in 1919 showed an even greater increase over 1914, 4.84 times. The revenue from the income tax in 1919 was 6.17 times as great as in 1914 and that from the combined income and excess-profits tax in 1919 was 12.20 times as great as the revenue from the income tax in 1914. The indirect taxes did not increase to the same extent. The customs revenue in 1919 was only 2.98 times as great as in 1914 and the excise tax only 1.50 times as great. Non-tax revenues in 1919 were 2.97 times as great as in 1914.

The distribution by percentages of taxes for the years 1914 to 1919 is shown herewith:

Source	1914 Per cent	1915 Per cent	1916 Per cent	1917 Per cent	1918 Per cent	1919 Per cent
Income tax	23.9	30.6	38.1	35.3	33.9	32.7
Excess profits	....	....	....	24.4	31.1	32.1
Total tax	82.2	83.5	86.1	89.7	86.7	88.2
Non tax revenues	17.8	16.5	13.9	10.3	13.3	11.8
Grand total revenue	100.0	100.0	100.0	100.0	100.0	100.0

Throughout the war, there was a continuous increase in the actual revenue, and leaving out of consideration the year 1915, when the expenditures were rather low, a continual increase in the ratio of revenues to expenditures and of the ratio of taxes to expenditures. The revenues collected in the fiscal years ending March 31 were as follows:

Year	Millions sterling
1914	197.2
1915	226.7
1916	336.8
1917	573.4
1918	707.2
1919	888.8
Total, 1915–1919.	2930.1

The important items of revenue during the war are given by fiscal years ending March 31, on page 76.

ii. *Direct Taxes*

Direct taxation produced over 60 per cent of the total tax revenues after the excess-profits tax came into full effect in the fiscal year 1917. In the first two years of the war the income tax, which was the chief direct tax, brought in an increasing percentage of the total tax revenue, and rose from 29 per cent in 1914 to 36 per cent in 1915 and 44 per cent in 1916.

The munitions levy (subsequently abandoned), and the excess-profits tax were the sole new sources of direct tax revenue. The increase in the amount of direct-tax revenue was due in part to a continuous raising of the rates of old taxes and in part to the introduction of the new tax.

(a) *Income Tax*—

In the first war budget in the fall of 1914 the rates on the income tax were doubled. In the following fiscal year the normal tax rate was increased and the exemption limit was lowered from £160 to £130. Furthermore, supertaxes from 10d. to 3s. 6d. were levied on incomes of £2,500 to £10,000. Unearned incomes, so called, were taxed more heavily than earned incomes. In the fiscal

year 1916-17 there was a further increase in rates, the minimum being 2s. 3d. on incomes between £130 and £300 when earned, and 3s. on unearned incomes, and a rate of 5s. in the pound applying on incomes over £2,500. There was no change in the supertax above this sum. But in the fiscal year 1918-19 the supertax was raised to from 1s. to 4s. 6d. in the pound. There were no further increases in the rate on incomes under £500.

SOURCES OF REVENUE IN GREAT BRITAIN DURING THE WAR[7]
(in million pounds)

Source	1914	1915	1916	1917	1918	1919	Ratio of 1919 to 1914, per cent
TAX REVENUES:							
Customs..........	34.3	36.6	59.6	70.5	71.2	102.8	298
Excise..........	39.6	42.3	61.2	56.4	38.8	59.4	150
Estate duties.......	27.3	28.4	31.0	31.2	31.9	30.2	111
Income tax, etc.....	47.2	69.4	128.3	205.0	239.5	291.2	617
Excess profits.......	....	....	....	139.9	220.2	285.0	...
Stamps, land tax, house duty and other minor taxes *	....	....	....	....	....	....	...
Total tax revenues.	162.0	189.3	290.1	514.1	613.0	784.1	484
NON-TAX REVENUES:							
Postal service.......	21.2	20.4	24.1	24.3	25.2	29.4	139
Miscellaneous.......	2.3	5.9	9.8	16.5	52.1	52.3	2270
Telegraph and telephone, Crown lands, Suez Canal, etc.*..	....	....	....	....	....	....	......
Total non-tax revenues...........	35.2	37.4	46.7	59.3	94.2	104.7	297
Grand total.......	197.2	226.7	336.8	573.4	707.2	888.8	450

* Not specified.

The yield of the income tax was £47.2 million in the fiscal year 1914, £69.4 million in the fiscal year 1915, £128.4 million in the fiscal year 1916, £205.0 million in the fiscal year 1917, £239.6 million in the fiscal year 1918, and £291.2 million in the fiscal year 1919.

[7] Finance Accounts of the United Kingdom, annual House of Commons paper.

(b) *Excess-Profits Tax*—

This tax was the principal innovation in British tax policy and proved to be a fruitful source of revenue. The British excess-profits tax was a tax on war profits, that is on profits in excess of the average profits of any two of the three pre-war years. It bore no relation to invested capital and was simpler to calculate than the American excess-profits tax. It was introduced in the budget of September, 1915. The rate for the period August 1, 1914, to July 1, 1915, was 50 per cent of the excess over the pre-war standard. In the fiscal year 1916-17 the rate was increased to 60 per cent and as a result the returns exceeded the estimates by over 50 per cent. In the fiscal year 1917-18 the rate was further increased to 80 per cent. In the first budget after the war the rate was reduced to 40 per cent and in 1921 finally abolished.[8]

The yield on the excess-profits tax was about £140 million in the fiscal year ending March 31, 1917, £220 million in the fiscal year 1918, and £285 million in the fiscal year 1919.

iii. *Indirect Taxes*

Indirect taxes did not bring increased revenue to as great an extent as did direct taxes. The rates on the old taxes, customs and excise, were increased and a few new indirect taxes were levied.

(a) *Customs and Excise Taxes*—

In the first war budget of David Lloyd George the duty on tea was raised from 5d. to 8d. per pound and the duty on beer was raised from 7s. 9d to 25s. per barrel. In the fiscal year 1916 the budget of Reginald McKenna raised the indirect taxes by increasing the rates by 50 per cent on tea, cocoa, coffee, tobacco and other articles of general consumption and by 100 per cent on gasoline and patent medicines. In the fiscal year 1916-17 the existing rate on sugar was raised 50 per cent, on tea and coffee 100 per cent, and on cocoa 300 per cent. In the fiscal year 1917-18 the rate on tobacco was raised. The tax on most other commodities was left unchanged. In the fiscal year 1918-19 the increase in taxation was obtained chiefly from indirect taxes. The direct tax rates seem to have reached the limit of productivity. The rate on beer, matches and gasoline was doubled, the rate on sugar was raised from 11s. 8d.

[8] Address of Austen Chamberlain at Birmingham, Feb. 3, 1921.

to 25s. 8d. per hundredweight, and the rate on tobacco was raised from 1s. to 8s. 2d. per pound.

(b) *Consumption and Luxury Taxes*—

Although every tax is repressive to some extent and the customs and excise taxes did tend to check consumption, several specific taxes were levied with the aim not so much of producing revenue as of curtailing the use of non-essential goods. These were, however, introduced rather late in the war. They were levied on articles that had been free from taxation. In the fiscal year 1916 an import tax of 33⅓ per cent was levied on motor cars, motorcycles, musical instruments, and cinema films. In the fiscal year 1917 the so-called luxury tax was extended to include admission to theaters, moving pictures and outdoor sports. In the fiscal year 1918 a very high tax was levied on dogs newly acquired and the tax on dogs already owned was increased, with the prime purpose of checking their consumption of food. In the fiscal year 1918-19 a luxury tax such as was in effect in the United States was levied on two classes of commodities, (1) outright luxuries such as jewelry, perfumes, pianos, yachts, etc., the tax on which was applied regardless of the price, and (2) semi-luxuries such as clothing, meals and lodging at clubs and hotels, etc., which were subject to tax only when the price exceeded specified figures.

(c) *Non-Tax Revenues*—

The non-tax revenues did not constitute a large percentage of the total revenues. They were not capable of expansion to the extent that the tax revenues were. In 1914 they constituted about 18 per cent of the total revenue and in 1919 about 12 per cent. In the fiscal year 1916 the rates on postal, telegraph and telephone service were increased and in the fiscal year 1919 postal rates were further increased and a stamp tax on checks was levied.[9]

D. Problems of the Post-War Budget

The post-war budget bristled with difficulties. The magnitude of the debt-service charges, the problems of reducing military and civil expenditures, of maintaining the returns from the income and

[9] For full discussion see speeches of Austen Chamberlain and interpellations, House of Commons Debates, April 30, 1919, cols. 175 *et seq.*

excess-profits taxes, of balancing the budget, of meeting the deficit, and of handling the floating debt,—these were a few of the difficulties that faced the head of the Treasury.

i. *Comparison of Pre-War and Post-War Budgets*

The budget for 1920–1921 called for a revenue 7.5 times as large as the budget for 1912-1913 and the revenue in the supposedly normal post-war budget set up by the Chancellor of the Exchequer would be about 4.3 times as large.

In setting the hypothetical budget for a normal year the Chancellor of the Exchequer made no allowance for interest on advances to the British government by the United States. The normal budget is based on the assumption that the interest due to Great Britain will offset the interest due by Great Britain. On the $4,277,000,000 owed to the United States, the annual interest debit will be about £42,000,000. This assumption is open to question.

BUDGET FIGURES FOR 1912–13, COMPARED WITH ESTIMATES FOR 1920–21 AND A NORMAL POST-WAR BUDGET [10]

(in thousand pounds sterling)

Items	1912–13			1920–21			Normal Post-war Year		
	Amount	Per cent	Relative figure	Amount	Per cent	Relative figure	Amount	Per cent	Relative figure
REVENUE									
Customs and excise..	71,485	37.9	100	348,650	24.6	488	290,000	36.0	406
Inland revenue......	83,268	44.1	100	686,500	48.4	825	460,000	57.0	552
Post office..........	29,175	15.5	100	53,000	3.7	182	43,000	5.0	148
Non-tax revenues...	4,874	2.5	100	330,150	23.3	6760	13,000	2.0	266
Total revenues....	188,802	100.0	100	1,418,300	100.0	750	806,000	100.0	427
EXPENDITURES									
Consolidated fund...	37,018	19.6	100	376,198	31.8	1015	373,000	46.0	1008
Army and navy service...............	72,436	38.4	100	230,429	19.4	318	135,000	17.0	186
Civil service........	51,944	27.5	100	497,318	42.0	960	246,600	30.0	475
Revenue and post-office service......	27,224	14.5	100	80,157	6.8	294	53,400	7.0	196
Total expenditures.	188,622	100.0	100	1,184,102	100.0	630	808,000	100.0	428

[10] Hansard, April 30, 1919, cols. 119, 120, 141. See also memorandum presented by the Chancellor, October 23, 1919, Cmd. (376, 377), revised in Cmd. (379).
London Economist, July 3, 1920, p. 8, and April 24, 1920, p. 856.

The above table shows some striking facts. A comparison of the items of budget revenue shows that inland revenue constituted the chief source of revenue in each of the three years, before the war, immediately after the war and during a normal post-war year. This consisted of income and excess-profits taxes chiefly, and to a less extent of inheritance and stamp taxes, the land tax and house and land-value duties. Customs and excise constituted the second largest source of revenue during each of these three years.

Of the expenditures in the budget the army and navy service represented the largest percentage of any item in the pre-war budget. In 1920-21 the civil service represented the largest percentage of expenditure, and in a normal post-war year the consolidated fund services will constitute the largest percentage of expenditure. The lowest item of expenditure in each of the three years is the revenue and postoffice service. The next smallest item of expenditure is in the pre-war year, the consolidated-fund service, and in the after war years the army and navy service. In fact the army and navy service in 1920–21 as well as in the normal post-war year constitutes so small a percentage of the total, 19 per cent and 17 per cent respectively, that even a substantial reduction in the army and navy service will not afford any decided help in the problem of balancing the budget. Unless revenue can be materially increased, and this is doubtful, the chief economies will have to come out of the largest item; the service of the debt may be reduced by refunding at a lower rate of interest.

The civil-service expenditures may hardly be curtailed. Among the largest items are education, science, art, postoffice, and pensions and insurance. Few of these can be greatly reduced.

A comparison of the relative figures in the table, in which the 1913 figures have been taken as a base of 100 shows that on the revenue side the largest increase was in inland revenue, chiefly from the income and excess-profits taxes. The customs and excise taxes show the second largest increase, chiefly on a limited range of commodities. The increase in non-tax revenues is without significance, as the heavy increase for 1920-21 was due to the sale of miscellaneous war assets. On the expenditure side of the budget, by far the largest increase is in the service of the debt. The second largest increase is in the civil service.

ii. *Meeting the Deficit*

(a) *Extent and Cause of the Deficit*—

From the fiscal year 1915 through the fiscal year 1919 Great Britain met by revenue about 28 per cent of her total expenditures. That is, there was a deficit of about 72 per cent in the five war budgets. Domestic and foreign loans bridged the gap between receipts and disbursements. In the fiscal year 1919–20 the expenditures were £1,665,773,000 and the revenues only £1,339,571,000, leaving a deficit of £326,202,000, or nearly double the total cost of government before the war. This deficit would have been £622,633,000, almost twice as great, but for the fact that the sale of war supplies and other non-tax revenues yielded £296,431,-000. In 1912–13 the budget practically balanced. In 1919–20 the receipts were 38 per cent short of expenditures. In 1920–21 there was estimated a deficit of only £95,952,000 or 8 per cent of expenditures which was to be more than covered by sales of war supplies and by other non-tax revenue totaling £330,150,000, leaving an estimated net credit balance of £234,198,000 for the reduction of the debt, which at the end of the year was actually a budget of £230,557,000 surplus.

The cause of the deficit for 1919–20 was said by Mr. Chamberlain to be the continuance of military expenditure as a consequence of the delays in the establishment of peace. Again large expenditures for the fiscal year 1920 were incurred on account of subsidies for bread, coal, and the railways. The bread subsidy cost about £56,000,000, the coal subsidy about £32,000,000, and the railway subsidy about £53,000,000, a total of about £141,000,000 for the year. These charges represented concretely the cost to the Government of financing the war by inflation, and were as properly a war cost as interest on the debt. Other factors contributing to creating a deficit were the large expenditures on pensions and higher pay for the army and navy, as well as unemployment doles and other after-war expenditures.

The party of the opposition criticised the use of money from the sale of war stores to balance expenditures. These stores were purchased with borrowed funds and the salvage money should have been credited to the debt and not to the revenue account. The use of these funds in the budget was compared to "the sale of one's furniture to pay the rent."

(b) *Wiping Out the Deficit*—

To meet the deficit is was necessary to increase revenues and decrease expenditures. A special companies' profits tax of 1 shilling in the pound, that is 5 per cent, was to be levied on the profits of limited liability companies. Other increases in taxes affected gasoline, alcoholic liquors, and cigars and there is to be a lowering of the limit of income at which super-taxes become effective. Minor changes in taxation covered stamp taxes, telegram, telephone, and postal rates.

In addition to broadening the basis of taxation and increasing the volume of revenue the Exchequer plans to effect economies such as the revision of railroad rates so as to make the railroads self-supporting, and the elimination of the bread subsidy and the unemployment doles.[11] The temporary expenditures arising out of the war such as land-settlement loans, railway deficits, donations to ex-soldiers for training, education, resettlement, and unemployment, and other small items, amounted to £182,000,000. In 1920–21 there have been reductions from the 1919–20 expenditures of about £374,000,0000 for army and navy services and about £72,000,000 for the civil service.

The 1920–21 budget as compared with the 1919–20 budget shows a reduction of 29 per cent in expenses, from £1,666,000,000 to £1,184,000,000, and an increase in revenue of 6 per rent from £1,340,000,000 to £1,418,000,000. As a result the deficit of £326,000,000 in 1919–20 was converted into a credit balance of £234,000,000.

iii. *Maturing and Floating Debt*

Although British financing in the war was sound and conservative (about 25 per cent of the loans were short-term and 75 per cent were long-term), the question of handling the floating debt is a serious one. At the end of the year 1919 about £1,500,000,000 of the British debt was due within the year. The budget for 1920–21 was expected to have a balance of about £234,000,000 available for the reduction of the debt.

[11] Report of Select Commitee on National Expenditures for 1920. House of Commons papers, 113, 142, 168, 238, 245.

The classification of the public debt by maturities follows:

NATIONAL DEBT OF GREAT BRITAIN AS OF DECEMBER 31, 1919
(in million pounds sterling)

		Per cent of grand total
Due within one year:		
Ways and Means advances	245.2	
Treasury bills	1106.6	
Exchequer bonds	160.3	
Anglo-French loan	51.4	
Victory bonds	5.0	
Total	1566.5	19.39
Due within five years:		
Exchequer bonds	146.4	
Victory bonds	20.1	
Annuities	8.2	
War savings certificates	267.3	
Debt in United States	48.5	
Debt due to United States Government	867.4	
Other debt due foreign nations and dominions	329.8	
Total	1687.7	20.89
Due in five to sixty years:		
Exchequer bonds	16.6	
Victory bonds	334.4	
National war bonds	1508.8	
War loans	2122.6	
Debt in United States	60.0	
Funding loan	409.1	
Total	4451.5	55.11
Perpetual:		
Annuities for life and term of years	11.8	
Consols	301.4	
Debts due to Bank of England	11.0	
Debts due to Bank of Ireland	2.6	
Total	326.8	4.04
Miscellaneous:		
Other capital liabilities	46.2	0.57
Grand total	8078.7	100.00

The Treasury attempted to reduce the floating debt at the time of the issue of the Funding Loan and Victory Bonds in 1919. The nominal amount offered was £575,000,000. Of the total the banks subscribed £110,000,000. Hartley Withers pointed out the difficulty of handling the floating debt after this attempt at funding it. In a pessimistic mood he said "the funding operation has been an almost complete failure and the only prospect that appears to lie before the government is one of continuing to finance by treasury bills or ways and means advances or by any other kite-flying method by which they can appear to make both ends meet."

The floating debt must either be funded or paid off. At present it can be funded only at a high rate of interest, for only the reduction in the floating debt makes it possible to reduce the rate of interest. Unless the government has a surplus of revenue over expenditure, the alternatives are either to issue new treasury bills to meet those maturing or else to resort to further inflation through ways and means advances. The sound way of liquidating the floating debt is to raise cash either through taxation or through the sale of war savings certificates. The continued sale of war savings certificates, the Drummond-Fraser plan of issuing bonds continuously in small lots, may offer a solution to the problem of handling the floating debt. Such a solution would be sound because it would involve continued saving by the people, the only method by which the fiscal problems of the belligerents may be met. The Treasury bonds sold in 1920 were aimed to fund the treasury bills. They were to bear ½ per cent higher rate than the bills, until 1925, but only 5 per cent thereafter, and were redeemable by the holder upon one year's notice.

At the end of April, 1921, an attempt was made to refund maturing National War bonds by means of a 3½ per cent Conversion loan maturing in 1961 and convertible at the rate of £166 per £100 of National War bonds. In spite of the high yield offered, about 5.7 per cent, for 40 years, the funding scheme was a failure. Of £632 million of War bonds maturing by September, 1923, which had the option of conversion, only £148 million were offered up to the beginning of June, 1921, an amount hardly sufficient to retire the £198 million of National War bonds maturing October 1, 1922.

On July 5, 1921, the Chancellor of the Exchequer offered for sale "on tap" and without limit as to amount, a new issue of 5½

per cent Treasury bonds at 97, maturing April 1, 1929, and convertible up to October 1, 1922, at par into £146 of 3½ per cent Conversion loan. The results were unsatisfactory. By August 3, 1921, only £89 million of new Treasury bonds were issued in exchange for National War bonds and Exchequer bonds, £52 million only of the latter being converted out of a total of £72 million, maturing October, 1921. In the words of the editor of the *Statist*, "If the new loan proves a failure, and if current expenditure is not drastically reduced, we may expect an increase in Treasury bills and Ways and Means Advances during the current financial year of something like 200 millions."[12]

E. An Appraisal of British War Finance

In the light of the experience of the belligerents it is possible to appraise the theories of war finance advocated by economists and the policies followed by the several governments. The standards by which the policies of war financing are to be judged relate to the difficulty in raising funds, the need for changing the fiscal policy, the distribution of the burden with respect to ability to pay, and the outlook for the future.

i. *Availability of Funds*

Great Britain was able to finance her allies as well as herself. Her financial policy made it possible to lend to her co-belligerents 22 per cent of the total amount of the British debt at the end of the war. As an offset the borrowings from the United States Government were only 11 per cent of the total British war debt. British credit held out for almost three years until America assumed the burden of the weak Allies.

(a) *Moderate Rise of Interest Rates on War Securities*—
As the demand for funds increased, interest rates rose. In 1914 treasury bills were sold at a yield of 3⅝ per cent and in 1915 the rates ranged from 2¾ per cent for three-months bills to 3¾ per cent for nine-months bills. In 1916 treasury bills were offered not at a fixed published rate but on the old competitive or

[12] Statist, April 30, June 4, July 9, and August 6, 1921, pp. 740, 1037, 42 and 228.

tender basis and the rates were approximately 4¾ to 5 per cent.[13] In 1917 when the fixed rate basis was restored, the rates ranged from 4⅝ per cent on three-months bills to 4⅞ per cent on nine-months bills. The rates on exchequer bonds increased likewise. In 1914 3 per cent exchequer bonds were sold on the system of tendering to yield 3.18 per cent. In 1915 the fixed rate was 5 per cent. In 1916 the rate was raised to 6 per cent in order to deflect new money from treasury bills to longer term exchequer bonds. The rise in the rates on exchequer bonds caused the decline in the quotations of all outstanding securities. In 1917 the rate was lowered to 5 per cent.[14]

The rates on long-term loans rose with the increase in the volume outstanding and the demands for funds continuous. The first loan in 1914 was issued at 95, at a rate of interest of 3½ per cent and a yield of 4 per cent. In 1915 the second loan was put out at par, and at a rate of interest of 4½ per cent. In 1916 the taxable form of the loan was issued at 95, at a rate of interest of 5 per cent and a yield of about 5.34 per cent. The 1917 loan was put out at par and at a rate of interest of 5 per cent, but payable at a premium so that the yield was about 5.36 per cent. This, the fourth war loan, was issued under the Drummond-Fraser plan of continuous borrowing. The tax-exempt issues of the third and fourth loans were issued at par and at a rate of interest of 4 per cent.

The foreign loans placed in 1915 and 1916 in the United States were issued at around 98, bore interest at 5 per cent, and yielded 5.5 per cent. The last private foreign loan placed in the United States, in 1917, bore interest at 5½ per cent and yielded 6 per cent.

/The proof of the soundness of British war finance lies in the fact that the rate of interest for funds did not rise greatly./ The restriction on new capital issues was an important factor but secondary to the strength of British credit in keeping down the rates of interest./ The slight premiums upon redemption of the loans and the slight discount at issue were not indications of weakened credit but merely convenient means of increasing slightly the yield of the bonds. With the exception of the United States, Australia, New Zealand and India, which issued war bonds exclu-

[13] Industry and Finance, p. 246.
[14] *Ibid.*, p. 250.

sively at par, the belligerents either sold bonds at a discount or agreed to redeem them at a premium. This practice should not at all be taken as an evidence of impaired credit.

After America entered the war British credit was strengthened so that the terms of the sixth war loan were not more favorable than those of the preceding. It carried no higher price of issue or of redemption than the previous loans and in addition purchasers were deprived of the privilege of converting into past or future war loans.

(b) *No Lottery Loans Issued*—

Although some of the belligerents in financial straits resorted to lotteries to raise money, Great Britain maintained her traditions of strength. The proposal had been agitated during the war and was referred to a select committee of the House of Commons in 1918. The proposal was to issue a 4 per cent tax-exempt loan of which the subscribers would receive 2½ per cent in interest and the other 1½ per cent would be put into a pool from which would be drawn prizes ranging from £1 to £1,000. British publicists were in decided opposition to the plan. They contended that the bonds would be a national investment with regard to five-eighths of the interest and a lottery with regard to the rest, and that the Lottery Act in effect for one hundred years would have to be repealed or suspended, and that the British Chancellor of the Exchequer would become a lottery manager, and the Treasury would be converted into a gambling house.

"As if the gambling spirit were not rife enough in the country the state would foster it by giving it the seal of its approval and would carry on an active propaganda to urge all classes to join the speculation. It would encourage people to get rich not by work but by hazard and it would urge them to accept its offer on the ground of patriotic duty. It is not surprising that the chairman of the War Savings Committee bitterly denounced the proposal as the destruction of the work on which his vast organization was engaged." [15]

The proposal was defeated in the House of Commons on December 1, 1919, by an overwhelming vote, 276 to 84.

[15] Samuel, Herbert. The Plight of the Taxpayer. Contemporary Review, December, 1919.

ii. *Fiscal Policy Unchanged Throughout the War*

One test of a policy of war finance is the necessity of abandoning it when it breaks down. The experiences of the United States in the War of 1812 and in the Civil War and of France and of Germany in the World War were evidences of wrong fiscal policies. Great Britain, however, adhered to a defined and fairly consistent policy throughout the war. A large percentage of her expenses was met by taxation. The loan policy involved the use of ways and means advances, that is, loans from the Bank of England, when funds were needed quickly. Treasury bills running for a few months and exchequer bonds running for a few years were used to refund ways and means advances. They were also used in anticipation of long-term loans, the preparations for which lasted months and therefore compelled the use of short-term funds in the interval. Finally when long-term loans could not be raised at favorable terms, treasury bills were sold at home and abroad with intention of renewing them at maturity. The floating debt constitutes an embarrassing problem, for bills often mature when money is tight and must be renewed at rising rates. Foreign loans were raised in the United States, Japan, Argentina and elsewhere from 1915 onward throughout the war. The utilization of the credit reserves of the United States upon her entry into the war relieved the British treasury of the need to resort to open-market borrowing at ever-increasing rates.

Taxation was vigorous and increasingly heavy throughout the war. Not only was the interest on loans fully covered, but a large percentage of the war expenditures was met out of taxation. The percentage of taxes to expenditures increased from 1916 through 1919. Direct taxes constituted the chief source of funds. These are democratic in character and not easily shifted. The income and excess-profits taxes produced over 60 per cent of the total tax revenues. The number of sources of tax revenue were few. The rates on most of these were gradually and continually raised throughout the war. A notable change in the tax policy was the introduction late in the war of luxury and consumption taxes the purpose of which was primarily to repress non-essential consumption, rather than to raise revenue.

iii. *Democratic versus Militaristic Finance*

The British policy was characterized not only by financial prudence but also by political sagacity. The heavy reliance on taxes reduced the evils of inflation which bear most heavily upon the class living at the margin of existence, earning just enough to maintain life. The vigorous tax policy prevented the cost of living from rising rapidly in England as it did in the countries that used loans or note issues more extensively, such as France, Germany, and Italy. Direct taxes, the income and excess-profits tax, are not easily shifted and can be adapted to bear in accordance with the capacity to pay. Britain used these chiefly. The Continent relied on indirect taxes, which raised the cost of living because they were shifted to the consumer. In their incidence indirect taxes usually press most heavily upon those least able to pay. With conspicuous political sanity, the British did not neglect taxation in the hope of an indemnity as the Germans did or in the hope of complete reparation for damages as the French did. Britain followed a politically democratic and an economically self-reliant tax policy.

iv. *The Outlook*

(a) *A Retrospect*—

It may seem alarming that the expenditures of the six years from April 1, 1914, to March 31, 1920, £11,268,000,000, were greater than the expenditures of the 226 years from 1688 to 1914, which amounted to £10,944,000,000. However, an historical comparison is reassuring. The English public debt in 1727 was £52,000,000, in 1817, £839,000,000, and in 1919 £8,078,000,000. In the 90 years preceding the close of the Napoleonic War the English public debt increased 15.65 times and in the 102 years prior to the end of the Word War it increased only 9.62 times.

The World War led to a tremendous increase in the public debt. But so did the Napoleonic Wars. The first ten years of the Napoleonic Wars caused an expenditure greater than the 51 years of peace of the preceding century. And the second 15 years of the Napoleonic Wars occasioned an expenditure twice as great as the 51 years of peace which prevailed during the period from 1698 to 1792.

EXPENDITURES OF THE NAPOLEONIC WARS AND OF THE CENTURY PRECEDING [16]
(in million pounds sterling)

Years	Period	Peace		War	
		Number of years	Amount spent	Number of years	Amount spent
1698–1701	Peace	4	15.1		
1702–1714	Wars of Ann	....	....	13	98.8
1715–1739	Peace	25	142.5		
1740–1749	Spanish-Austrian Wars	....	....	10	95.0
1750–1755	Peace	6	39.6		
1756–1766	Seven Years' War	....	....	11	159.5
1767–1775	Peace	9	89.1		
1776–1785	American War	....	....	10	218.0
1786–1792	Peace	7	116.2		
Total		51	402.6	44	571.3
1793–1802	First part of Napoleonic Wars	....	....	10	454.0
1803–1817	Second part of Napoleonic Wars	....	....	15	805.0

A comparison of the wealth and debt of Great Britain at the end of the Napoleonic Wars and at the beginning of the World War will indicate the probable outlook after the World War. In a century the population of Great Britain increased 2.7 times and the national wealth increased 5.3 times. In spite of three wars during the nineteenth century the debt of Great Britain at the beginning of the World War was only 0.84 as great as at the end of the Napoleonic Wars. The national income in the century following the Napoleonic Wars increased 5.2 times and debt charges decreased to 0.77 of the amount at the end of the Napoleonic Wars. During the World War the British public debt increased about elevenfold and the debt charged increased about twelvefold. The difference between the changes in the public debt and in the debt charges is due to the fact that in the century following the Napoleonic Wars refunding operations reduced debt charges faster than the debt and during the World War the rise of interest rates increased the debt charges more rapidly than the debt.

[16] Hirst, F. W., Credit of the Nations, pp. 19, 20. See also Fisk, Harvey E., English Public Finance, p. 38.

WEALTH AND DEBT OF GREAT BRITAIN

Date	Population, millions	National wealth, million dollars	National debt, million dollars	Debt per capita. Dollars	Debt as percentage of wealth per cent	Relative Figures (1817 figures = 100)		
						Population	National wealth	National debt
At end of Napoleonic Wars (1817)	17	13,100	4,130	243.30	31.5	100	100	100
At beginning of World War (1914)	46	69,600	3,458	75.03	4.97	270	530	84
At end of World War (1919)	46	69,600*	37,657	817.04	54.10	270	530	911

* It is assumed that the pre-war and post-war wealth are the same, that the new plants erected are equivalent in value to property destroyed. F. W. P. Lawrence in his Levy on Capital, p. 41, assumes a net loss of about 10 to 15 per cent. Harvey Fisk in his English Public Finance, p. 37, assumes that the wealth of Great Britain increased 66 per cent during the war. This is undoubtedly an error.

NATIONAL INCOME AND DEBT CHARGES OF GREAT BRITAIN

	National income, million dollars	Debt charges, million dollars	Debt Charges,		Relative Figures	
			Per Capital	Per Cent of Income	National income	National debt charges
At end of Napoleonic Wars (1817)	1,944	155	9.10	8.0	100	100
At beginning of World War (1914)	11,000	119	2.58	1.08	515	77
At end of World War (1919)	11,000	1421	30.83	12.92	515	916

(b) *The Prospect*—

Even the economists who advocated the capital levy or the war-wealth levy, because the burden of debt charges is so heavy immediately after the war, admitted that over a long period of years the new financial burden would be borne as easily as the relatively gigantic debt of the Napoleonic Wars was borne after a generation following its close. The quotation from Macaulay of the wailing of the publicists about the unbearable debts of previous wars, may be recalled here. "On what principle is it that when we see nothing but improvement behind us we ought to expect nothing but deterioration before us? The prophets of evil were under a double illusion. They made no allowance for the effect

produced by the incessant progress of every experimental science and by the incessant efforts of every man to get on in life. They saw the debt grow but they forgot that other things grow as well as the debt. They greatly overrated the pressure of the burden. They greatly underrated the strength by which the burden was to be borne."

One of the factors that may make the burden of the debt greater is deflation, that is, an increase of commodities in terms of the monetary units. An increase of the production of goods faster than of gold or credit may make the burden heavier. But to the extent that business profits increase and are applied to the repayment of the debt, increased production will make the burden lighter. Furthermore, deflation means lower prices, and ultimately lower rates of interest. Therefore conversion or refunding of the debt may reduce the burden *pari passu* with the increase in the purchasing power of money, taxes and interest. The factors making the load lighter would be an increase in the gold output or of the use of credit instruments, or of the velocity of circulation. This is the gradual, continuous and historic process of inflation under the influence of which prices rise.

CHAPTER III

FRENCH PUBLIC FINANCE[1]

A Pre-War Situation

The French public debt was handled with difficulty even in the eighteenth century. Except for Colbert and Turgot, who enforced a vigorous reduction of the debt and of debt charges, the French Ministers of Finance favored the policy of borrowing. The French Revolution was in large part due to the methods of financial administration.[2] After the Franco-American War an ambitious program of public works added to the national debt. For a decade from 1881, the budget did not balance and loans were issued to meet the deficit. The extra-budgetary expenses in this decade exceeded fr. 5,000 million. From 1871 to 1918 the

[1] *Official Sources:*
Annuaire statistique. Statistique générale de la France.
Bulletin de la statistique générale de la France. (Quarterly.)
Budget générale de la France. (Annual.)
Exposé de motifs du projet de loi (of the Revenue Laws).
Bulletin de statistique et de législation comparée. (Monthly.)
Journal officiel:
Sénat débats et documents.
Chambre des deputés débats et documents (Speeches of Ministers of Finance Ribot, 1915–16; Klotz, 1917–19, François-Marsal, 1920, Doumer, 1921).
Rapports généraux du commission de la budget, Sénat et Chambre.
The report of the Budget Committee of the Chamber (1919, 1918) contained beside the budget (1) an official history of French finances since August, 1914, (2) a study of the war finances of the other belligerent, (3) war time history of the foreign exchanges on the various financial centers.

Semi-official Sources:
Bulletin de la société d'economie politique.
L'Economiste français.
L'Economiste européen.
Revue de science et de législation financières.
Revue politique et parlementaire.

[2] Gomel, Causes Financières de la Révolution Française.
Stourm, Les Finances de L'Ancien Régime et de la Révolution.

public debt increased from 13,000 to 31,000 million, and of an increase in revenue of fr. 1,286 million, 71 per cent was absorbed by increased charges on the debt. The existence of a large and diffused public debt was regarded as an advantage to the state. Owing to the lack of a surplus of revenue over expenditure, the government could not maintain an effective sinking fund. At several intermittent periods in the nineteenth century, a nominal sinking fund was inaugurated, but it produced little tangible result. The reduction of debt charges was accomplished by conversions of a large part of the debt from 5 per cent in 1883 to 3 per cent in 1902.[8]

French finances in 1914 were not in a condition to stand the strain of a war. The per capita debt in France was, by a wide margin, the largest in the world, twice that of Great Britain, five times that of Turkey, six times that of Russia, eight times that of Japan, ten times that of Germany, and fifteen times that of the United States.

DEBT PER CAPITA IN 1914

France	$166.20
Belgium	94.28
Austria	84.99
Italy	82.55
Great Britain	75.03
Turkey	31.35
Russia	27.95
Japan	21.74
Germany	17.18
United States	11.33

For several years prior to 1914 France had been wrestling with the problem of her peace-time budget. In the attempt to balance it, she had introduced an income tax and a tax on securities which was bitterly opposed by large investors and bankers and their press. Further, in order to meet current expenses, she found

[8] Hirst, F. W., The Credit of Nations. Report of National Monetary Commission, Washington: Government Printing Office, 1910.
Bastable, C. F., Public Finance.
Leroy Beaulieu, P. Traité de la Science des Finances.
Le Trésor de la Rocque, Les Finances de la République.
Say, Léon, Les Finances de la France.

it necessary to float a 3½ per cent loan of 900 million francs to cover expenses in Morocco, and pay the cost of increasing her fleet and of carrying out the three-year military-service law.

The basic cause of the poor fiscal condition of France was the policy of maintaining a large perpetual debt. The French debt increased forty-eight fold from 1800 to 1914. On the other hand the debt of Great Britain increased only two fold in the same period. No other country in the world showed an increase at all comparable with that of France. In fact the British debt at the beginning of the World War was only 678 million pounds sterling as compared with 861 millions at the end of the Napoleonic Wars.

GROWTH OF PUBLIC DEBT IN FRANCE [4]
(in million dollars)

Date	Debt
1800	138.7
1815	247.7
1848	1,150.9
1871	2,423.5
1912	6,336.2
July 31, 1914	6,652.5
Jan. 1, 1919	28,702.6
July 1, 1920	53,200.0

The burden of a large debt and the lack of a broad and expansible basis of taxation are the two factors which determined the manner in which France financed the war and which in large part explain the difficulty in which France finds herself after the war.

B. Loans

i. *Cost of the War*[5]

The cost of the war for six years from August 1, 1914 was over fr. 233,000 million. The highest annual cost was reached in 1918, but it did not decline much in the two following years. About 20 per cent was raised from current non-loan revenue during

[4] Statesmen's Year Book, 1919; 1920 figures from M. Doumer's report for Finance Commission of the French Senate, Doc. Parl. Sénat, 1920, p. 344.

[5] The best exposition of the war finances of France is contained in the address of M. Klotz to the Chamber, December 29, 1919, Journal Officiel, Chambre, p. 5400, and in the advance report of M. André Lefèvre to

the six years, but up to the end of 1918, only 15.5 per cent was so raised. As a result of an increase in taxation after the war, this ratio rose. Advances by the Bank of France constituted an important source of funds, 13.7 per cent up to the end of 1919 and 11.7 per cent up to the middle of 1920. Loans constituted the chief reliance of the French Treasury during the war and furnished 68.8 per cent of the total receipts, up to the middle of 1920. The two loans issued during 1920 made it possible to fund a considerable part of the floating debt.

According to M. Paul Doumer, the reporter of the Finance Committee of the Senate, the war expenditure of France from August 1, 1914 to July 31, 1920 was fr. 233,300 million.[6]

WAR EXPENDITURES OF FRANCE

Period	Amount (in million francs)	Per cent
1914 (5 months)	6,590	2.8
1915	22,805	9.8
1916	32,945	14.1
1917	41,680	17.8
1918	54,537	23.4
1919	49,029	21.0
1920 (7 months)	25,714	11.1
Total	233,300	100.0

SOURCES OF REVENUE

Items	Amount (in million francs)	Per cent
Taxes and monopolies	43,300	19.5
Bank advances	26,000	11.7
National loans	72,000	32.4
Treasury bills	46,000	20.7
Foreign loans	35,000	15.7
Total	222,300	100.0

the Chamber, Journal Officiel, December 26, 1919, pp. 15, 144, *et seq.* See Revue de Science et de Législation Financière, 1919, xvii: 4, 529–613; Les Finances de Guerre de la France.

For a concise presentation see F. M. Williams, French War Finance. Federal Reserve Bulletin, February, 1921, pp. 174–181.

[6] Journal Officiel, Sénat, July 19, 1920. For figures to the end of 1919, see address of M. Klotz, *ibid.*

See also Rapport Général, Chambre, 1919; No. 6158, pp. 16–24, 37, 40.

ii. *Analysis of the Public Debt*

(a) *Growth of the Debt Analyzed*—

Analysis of the growth of the debt of France indicates that increasing reliance was placed on foreign loans and that a large percentage of the annual increase in debt was of short-term character. In the following table the United States government advances, although they are demand obligations, are considered as long-term debts. Bank advances are grouped with short-term loans. Internal loans, long-term or short-term, even if held by foreigners, are considered as domestic loans.

CLASSIFICATION OF ANNUAL BORROWINGS BY PERCENTAGES *

Items	1914	1915	1916	1917
Domestic short-term	96.6	42.7	58.8	55.5
Domestic long-term	3.4	55.3	20.4	18.8
Total domestic	100.0	98.0	79.2	74.3
Foreign short-term	*	2.0	15.1	9.6
Foreign long-term	0.00	0.0	5.7	16.1
Total foreign	0.00	2.0	20.8	25.7
Total short-term	96.6	44.7	73.9	65.1
Total long-term	3.4	55.3	26.1	34.9

*Foreign debt does not include about fr. 60,000,000 treasury bills sold in London and fr. 41,000,000 sold in New York, nor about fr. 200,000,000 of the first internal loan, subscribed abroad.

(b) *Analysis of the Total Debt*—

An analysis of the total debt up to January 1, 1919, indicates that about 21 per cent of France's borrowings were external and about 79 per cent internal. On the other hand about 56 per cent of the debt was in long-term bonds and about 44 per cent was unfunded. If the pre-war debt is eliminated, the foreign debt and the floating debt will appear as a higher percentage of the war debt. The table follows:

ANALYSIS OF THE FRENCH PUBLIC DEBT AS OF JANUARY 1, 1919

Items	Billion francs		Per cent of total debt	
Internal debt:				
Fixed	67.7		45.9	
Floating	49.1		33.3	
Total domestic		116.8		79.2
External debt:				
Fixed	15.1		10.3	
Floating	15.5		10.5	
Total foreign debt		30.6		20.8
Fixed debt	82.8		56.2	
Floating debt	64.6		43.8	
Total debt		147.4		100.0
Pre-war debt	34.2		23.2	
Net war debt	113.2		76.8	

Figures later in 1919 indicate a similar distribution and relatively greater long-term debt in 1920.[7]

This analysis is significant. The large floating debt will continue to be a disturbing factor until it is disposed of. Again, owing to the relatively large percentage of the external debt France will have an increased annual invisible debit in the balance of trade, and she will either have to export more to restore the balance of trade, or else suffer from the depreciation of her exchanges. Furthermore, should any reorganization of French finances take place, the large percentage of the foreign debt will make such a reorganization an international problem rather than an internal fiscal matter.

[7] M. André Lefèvre, in a report to the Chamber of Deputies, Journal Officiel, Dec. 26, 1919, pp. 15, 146.

For detailed analysis of debt as of March 1, 1921, see Bulletin de Statistique et de Législation Comparée, Feb., 1921, pp. 247–254.

Report of Consul Chas. D. Westcott, Paris, in Commerce Reports, May 13, 1921, pp. 898–9, gives figures as of March 1, 1921; total debt 302,745 million francs and foreign debt 83,245 million francs, taking 13.9 fr. to the dollar.

iii. *Advances from the Bank of France*

Of the three sources of funds open to a belligerent, taxes, loans and fiat money or fiat credit, the first two were closed to France in 1914. Her tax system was not capable of expansion, the income tax had not yet been put into effect, and her richest revenue-producing provinces were invaded. Furthermore, she could not immediately resort to loans. Subscriptions on the 3½ per cent twenty-five year bonds issued in July, 1914, remained unpaid. Therefore, fiat credit was the sole remaining resource available.

The declaration of a moratorium on August 11, 1914, and the suspension of specie payment made it necessary for the state to rely upon the Bank of France for prompt assistance. Unlike the ways and means advances which were deposit credits on the books of the Bank of England, the advances to the state by the Bank of France were in the form of bank notes, for the people were unaccustomed to the use of checks. The French bank notes were legal tender, and gold payments were suspended.

As the bank made advances to the state it had to raise the limit on the issue of bank notes, which in December, 1911, had been fixed at fr. 6,800 million. On August 5, 1914, the limit was raised to fr. 12,000 million, to 15,000 million on May 11, 1915, to 18,000 million on March 15, 1916, to 21,000 million on February 15, 1917, to 27,000 million in February, 1918, and by successive increases of about 3,000 million to 40,000 million in May, 1919, and 43,000 million in August, 1920.[8] The Bank of Algeria made advances to the state, but in relatively insignificant amounts.

During 1914 Bank of France advances were the chief source of funds. Advances declined sharply in 1915. Subsequently they increased because of the lack of other easily tapped sources of funds. In 1914 Bank of France advances constituted 61.7 per cent of the total loans of the year and in 1915 only 5.8 per cent,

[8] Les Advances de la Banque de France a l'Etat. Economiste Français, May 24, 1919, pp. 543-5.

The continuous increase in the limit of note issues of the Bank of France brings to mind the criticism of André Liesse of the suspension of the British Bank Act of 1844 during emergencies. See his volume on banking in France in the National Monetary Commission Report.

Journal Officiel, April 29, 1920, July 18, 1919, Mar. 6 and 2, 1919, etc. gives text of law.

in 1916 7.4 per cent, and in 1917 12.8 per cent. The increasing reliance on Bank of France advances is an indication of the weak fiscal policy of France. The extensive use of bank advances during 1919 was due to the desire of the government to avoid heavy taxation and thus to facilitate the transition from war to peace.

In addition to making advances to the state, the Bank of France also discounted treasury notes, to the extent of fr. 3,755 million up to the end of 1919, representing advances to allies. Bank of France advances were retired in part from time to time by the issues of long and short-term loans. The floating of every war loan was followed by a temporary decline in volume of advances to the state. To accelerate their retirement, the Bank of France was given the right to charge interest on the advances, as follows: On a permanent loan of fr. 200 million, no interest; on special advances up to fr. 21,000 million, 0.48 per cent; on advances of the next fr. 3,000 million, 0.35½ per cent; on advances above fr. 24,000 million, 3.0 per cent, of which 2½ per cent is

ADVANCES TO THE STATE

Year	Million francs	Per cent of total
1914	3,900	15.3
1915	1,100	4.3
1916	2,400	9.4
1917	5,100	20.0
1918	4,650	18.2
1919	8,350	32.8
Total..	25,500	100.0

credited to a fund to amortize the advances, and to guarantee bills extended under the moratorium.[9]

iv. *Short-Term Loans*

In addition to advances from the Bank of France, the French government relied upon short-term loans because this type of security was popular in the money markets of Europe. Furthermore, the decline in the volume of commercial paper as a result of the war made short-term government loans an acceptable sub-

[9] Report of A. M. Thackara, Consul General at Paris. July 15, 1920.

stitute, particularly in view of the fact that the Bank of France rediscounts these bills or makes collateral loans against them. The theory underlying the use of the short-term bills was that it was a prompt and convenient way of getting funds which could be retired by subsequent long-term loans.

The *bons du trésor,* treasury bills, ran from 6 months to one year, in denominations of 100 francs and upward. They were used before the war, about 434 million francs being outstanding on July 31, 1914. These had been purchased largely by the banks, but during the war an effort was made to sell them direct to investors, particularly after the armistice. They were sold in foreign markets as well as at home. The amount outstanding at the end of each year follows:

Year	Million francs
1914	149
1915	43
1916	44
1917	30
1918	565
1919*	2055

*November 30.

The *bons de la défense nationale,* the special treasury bills issued during the war, ran from three to six months, but rarely over one year. They were also issued in denominations as low as five francs, in order to reach the small investor, and as a result they passed as currency. They were used in paying munitions makers. These bills carried several inducements to subscribers; the interest was payable in advance, they were exempt from taxation, they had a variety of maturities, they were convertible into long-term bonds and they were acceptable as collateral on loans at the Bank of France. Before the war the amount of *bons* outstanding was limited to fr. 940 million. This limit was raised on December 3, 1914, to fr. 1,400 million, and in June, 1915, to fr. 7,000 million. The volume rapidly increased and the outstanding *bons de la défense nationale* aggregated at the end of 1916, fr. 12,575 million; 1917, fr. 19,500 million; 1918, fr. 22,334 million; and 1919, fr. 46,140 million. The volume outstanding at the end of 1919 was forty-nine times as great as the pre-war limit. The increase over the

previous year was 55 per cent in 1917, 14 per cent in 1918, and 106 per cent in 1919. The advances by the United States during 1918 made it possible to reduce these issues. The greatest increase both in amount and percentage occurred in 1919—in fact more than half of the total amount outstanding at the end of 1919 was issued during that year.[10]

A security, intermediate in maturity between the short-term bill and the long-term loan was the *obligation de la défense nationale*. *Obligations* resembled the exchequer bonds of Great Britain, and were issued for periods of ten years and later in the war for periods of six years. They bore 5 per cent interest, were issued at 96.5, and unlike the treasury bills were not limited in amount. As an inducement to subscribe, they were made tax exempt, and peculiarly the interest was paid in advance. These *obligations* originally brought little new money; they funded the short-term treasury bills and the remainder of the pre-war loan. At the end of 1919 fr. 568 million of the ten-year *obligations* were outstanding as compared with fr. 365 million at the end of 1918.

In the effort to get funds, a new type of security was issued, the *obligation-bons,* a cross between short-term and intermediate-term loans. They were issued for five years, but were redeemable at the option of the holder at the end of any six months interest period and payable with a bonus of a half year's interest, if held to maturity. During the year 1919 a new type of *obligation de la défense nationale* was issued. It was issued for six years, but was redeemable at the option of the holder at the end of one and one-half years, and at subsequent interest dates at increasing premiums. It bore 5 per cent interest payable semi-annually in advance. The inducements offered and the devices invented to obtain funds indicate a weak fiscal policy.

v. *Long-Term Loans*

The French fiscal policy was based on the assumption of a short war. Therefore, the short-term bill was the chief reliance of the French Treasury. It was only when the volume of short-term loans became unmanageable that long-term loans were issued,

[10] Address of M. Klotz, Dec. 29, 1919. Journal Officiel, Chambre, Débats, p. 5400, *et seq.*
Report of Consul General A. M. Thackara, July 15, 1920.

and then they were chiefly funding loans and raised only a relatively small amount of new money. The Germans apparently were prepared for a long war and their periodic loans were timed with precision. The French loans were issued at irregular intervals.

The first loan, the National Defense Loan, was issued in November, 1915, and although it was a *rente perpetuelle,* it was redeemable at the option of the government after January, 1931. The rate was 5 per cent and the price 88. About 10 per cent of the total amount of subscriptions was received from abroad. About 50 per cent of the total subscriptions was in new money and the rest was in short-term bills and pre-war *rentes* which were convertible at 66, a figure somewhat above the market rate. This inducement may have been necessary in order to raise funds but the effect of it was to increase the charges of the public debt because a 3 per cent *rente* convertible at 66 was accepted in payment of a 5 per cent bond issued at 88. The interest on this loan was tax-exempt.

The second loan was issued in September, 1916, a *rente perpetuelle,* but also redeemable at the option of the government after January, 1931. The price was 88.75. Treasury bills, *obligations,* and the remainder of the 1914 3½'s were receivable in subscription. The interest rate was 5 per cent and the first installment was payable in advance. The loan was tax-exempt.

The third war loan was issued in November, 1917, a *rente perpetuelle,* redeemable at the option of the government after January, 1943. The price was 68.60 and the interest rate 4 per cent. The yield was therefore higher than that of either of the earlier loans. As an inducement to subscribe, this loan was receivable in payment of the war-profits tax. Again *bons, obligations,* and the 3½'s of 1914 were accepted in subscription. As a result only about half the total subscriptions represented new money.

The fourth war loan was issued in October, 1918, at 70.80 and bore 4 per cent interest. The yield was lower than that of the previous issues. It was a *rente perpetuelle* but callable at the option of the government after twenty-five years. The privilege of conversion, as in the case of the former loans, was extended to the *bons* and *obligations* as well as to the holders of coupons of Russian bonds maturing during 1918, which were accepted up to 50 per cent of the total subscriptions. The interest on this loan was exempt from taxation.

The fifth or peace loan was issued in March, 1920, at par, the only loan issued at 100 since the beginning of the war. The rate of interest was 5 per cent. The novel feature of this loan was that the bonds were redeemable at a premium of 50 per cent, or at the rate of 150 francs for a 100-franc bond. Drawings are to be held semi-annually every September and March for sixty years after September, 1920.[11] The need for floating a lottery loan is a reflection on the strength of French finances, and was vigorously condemned as financial prestidigitation.[12]

The sixth war loan was issued in the fall of 1920 in denominations from fr. 100 up.[13] Like the fifth loan this also was issued at par and bore six per cent interest, free from taxation. The rentes were perpetual but the government had the option to redeem or convert the bonds after January 1, 1931. Subscriptions were payable in treasury bills, in 3½ per cent redeemable rentes, and in any of the previously issued war bonds, up to varying percentages of the subscription. The actual cash received was 33 per cent of the amount paid in.

LONG-TERM WAR LOANS OF FRANCE

Number	Date of issue	Rate of interest per cent	Price	Amount Subscribed Million Francs		Paid in cash		Maturity
				Par value	Paid in	Million francs	Per cent	
1	Nov., 1915	5	87.25	15,205	13,308	6,285	48	Perpetual‡
2	Oct., 1916	5	87.50	11,514	10,082	5,425	54	" ‡
3	Dec., 1917	4	68.60	14,882	10,209	5,134	50	*
4	Oct., 1918	4	70.80	31,304	22,163	7,099	33	" *
	Total....	......	76.50	72,905	55,752	23,943	43	
5	Feb., 1920	5	100.00	16,150	16,150	6,300	39	1980†
6	Nov., 1920	6	100.00	27,000	27,000	9,100	33	Perpetual‡
	Grand total	......	85.40	116,055	98,912	39,343	40	

* Redeemable after 1943.
† Payable by lot at 150.
‡ Redeemable after 1931.

The yield of the first loan was 5.73 per cent, of the second 5.71 per cent, of the third 5.83 per cent, and if redeemed at par by the government in 1943, the yield would be 6.52 per cent. The

[11] Text of law in Economiste Français, Jan. 3, 1920, p. 9.
[12] Liesse, André, Des Emprunts a Lots, Economiste Français, Oct. 18, and Dec. 27, 1919, pp. 481–3, and 801–3.
[13] Journal Officiel, August 3, 1920. Economiste Français, August 7, 1920, p. 171.

approach of victory in the autumn of 1918 made it possible to issue bonds at a lower yield, 5.65 per cent. The difficulties of the transition period resulted in the issue of a lottery loan, which would yield from about 80 per cent down to 5.13 per cent, depending upon the date at which the bond is drawn for redemption at 150. The Ministry of Finance returned to sound financial methods in issuing the sixth loan at a yield of 6 per cent.

During the period of hostilities the amount of cash was on an average 43 per cent of the amount paid in on subscriptions. In the transition period, the government relied on short-term financing and therefore the fifth and sixth loans were paid for not in cash but in other securities, to a larger extent than previously.

The issue of bonds at a considerable discount will increase the burden of the French debt, should the option of redemption ever be exercised by the government. As Gide pointed out,[14] a fixed debt of fr. 69,375 million produced only fr. 53,280 million in cash, and France must bear a burden of fr. 16,095 million in excess of the cash received. The average issue price of the bonds floated until the end of the war was about 76.6, and of all until the end of 1920 about 85.4. If the bonds are perpetual, and the discount is not amortized, this factor of course does not enter.

vi. *Foreign Borrowing*

(a) *Long and Short-Term Loans*—

France resorted to short-term foreign borrowing early in the war. A loan for two millions sterling was issued through Rothschilds. In the first year of the war, France sold about fr. 300 million of one-year treasury bills in London and about fr. 207 million in New York.[15] Again in 1915 the English exchequer advanced credits of about fr. 1,500 million secured by a deposit of gold of one-third the amount, and in 1916 the British treasury agreed to discount a limited amount of French treasury bills maturing three years after the war. The foreign subscriptions to the first internal loan amounted to about fr. 1,000 million. Short-term industrial credits were opened in the United States through Bonbright & Company for about fr. 75 million.

The first and largest unsecured foreign loan was the Anglo-

[14] Economic Journal, September, 1919.
[15] Doc. Parl. Sénats, 1915, p. 275.

French loan, dated October, 1915. The amount was $500 million, of which France received one-half. The price was 98, the rate of interest 5 per cent, and the term five years.

The next step in her foreign borrowing was the mobilization of securities for the purpose of floating a secured loan. The procedure followed was somewhat similar to that of Great Britain. The government called upon the holders of securities of neutral countries to deposit them for a period of one to three years, and agreed to add 25 per cent to the net return. Negotiable receipts were issued in exchange. The government reserved the right to hold or sell the securities, sales price being the highest quoted price during the preceding quarter.[16]

To render effective its control over the movement of securities in and out of the country, France prohibited the exportation of capital or securities for sale or deposit, or the opening of credits to foreigners or the purchase of shares outside of France.

The first secured loan placed by France in the United States was for $100 million. The collateral was held by the American Foreign Securities Company. It was dated August 1, 1916, ran for three years, bore 5 per cent interest, and sold to the public at 98. Another loan of $50 million was floated in September, 1916. The third secured loan floated in the United States amounted to $100 million, was dated April 1, 1917, ran for two years, bore 5½ per cent interest, and sold at 99. It was convertible at par into twenty-year, 5½ per cent bonds due April 1, 1937.

LOANS PLACED BY FRANCE IN THE UNITED STATES UP TO APRIL 1, 1917

Date	Loan	Par value (million dollars)
October, 1915	Anglo-French	250
July, 1916	American Foreign Securities Co.	100
September, 1916	Secured loan	50
October, 1916	City of Paris	50
November, 1916	Lyons, Bordeaux and Marseilles	36
	Industrial credits	65
April, 1917	Secured loan	100
	Total	651

[16] Economiste Français, pp. 254 and 262, February 19, 1916, and p. 676, May 13, 1916. Journal Officiel, May 5, 1916.
London Economist, June 10, 1916.
Commercial and Financial Chronicle, May 13, 1916.

The entrance of the United States into the war relieved France from her credit difficulties. The direct advances authorized by the United States up to June 15, 1920, totaled $3,048 million and the cash advanced as of the same date totaled $2,957 million. In addition France obtained advances from Great Britain amounting to £470.5 million or about $2,290 million. French dollar treasury bills were issued through J. P. Morgan & Company, after August 1, 1919.

(b) *Analysis of the Foreign Debt*—

A large percentage of the total debt is in external loans—at the end of 1919 about 20.8 per cent, excluding treasury bills and internal loans held by foreigners.

Most of the foreign debt of France is held in the United States and Great Britain, with small amounts scattered in other countries. The United States holds 49 per cent, Great Britain 45 per cent, Spain 2 per cent, Argentina 2 per cent, Switzerland 0.5 per cent, and Japan 0.5 per cent.

ANALYSIS OF THE FOREIGN DEBT OF FRANCE, JANUARY 1, 1919
(in million francs)

Items	Amount	Per cent
Fixed debt:		
United States Treasury advances	12,009.9	79.4
Anglo-French loan, part	1,376.2	9.1
Advances by banks in U. S	550.5	3.6
City of Paris loan	275.3	1.8
French cities loan	201.6	1.3
Secured loan in U. S	575.0	3.8
Japanese loan	147.5	1.0
Total	15,127.0	100.0
Floating debt:		
Treasury bills deposited in English Treasury	11,831.5	76.5
Treasury bills deposited in the Bank of England	1,890.0	12.2
Treasury bills sold in England	201.8	1.3
Bank credit in Spain	656.6	4.2
Bank credit in Sweden	76.8	0.5
Bank credit in Norway	86.5	0.6
Bank credit in Argentina	550.0	3.6
Bank credit in Switzerland	178.0	1.1
Total	15,471.2	100.0
Grand total	30,598.2	

(c) *Offset to Foreign Borrowing*—

Early in the war France made extensive loans to her allies. Up to the end of September 30, 1920, she had advanced in war materials to Russia fr. 4,210 million, to Belgium 2,286 million, to Roumania 758 million, to Serbia 706 million, and to Poland 431 million. The total advances made by France up to September 30, 1920, were fr. 13,617 million, which includes about 4,744 million of advances and about 8,873 million due for war materials given to them.

ADVANCES BY FRANCE TO ALLIES AS OF SEPTEMBER 30, 1920

(in million francs)

Country	Cash advances	War materials furnished	Total advances	Per cent of total
Russia	739	4210	4,949	36.4
Belgium	484	2286	2,770	20.3
Serbia	834	707	1,541	11.3
Poland	788	431	1,219	9.0
Roumania	384	758	1,142	8.4
Italy	889	0	889	6.5
Greece	430	376	806	5.9
Czecho-Slovakia	121	100	221	1.6
Others	75	5	80	0.6
Total	4744	8873	13,617	100.0

The foreign borrowing of France is more than offset if the pre-war foreign investments of France are included, amounting to about fr. 40,000 million, of which about one-fourth was in Russia.[17] Other sources indicate a higher proportion invested in Russia, from 18,000 million to 21,000 million francs, distributed as follows:

With the Russian Imperial Treasury	7,000 million francs
In Russian public utilities, railroads, etc., more or less under government control	9,000 million francs
In industrial enterprises in private hands but with government guarantees	3,000 million francs

However, as M. André Lefèvre criticized M. Klotz on this score, only about fr. 13,000 million remain intact because the bulk

[17] M. Klotz, in address to the French Senate, October 21, 1919.

of French investments were in Russia, Turkey and Mexico. Yet, until January 1, 1921, the French treasury paid coupons on Russian bonds guaranteed by the Russian Imperial government.

C. Taxes

i. *Principles and Policies*

(a) *Analysis of Revenues*—

As shown above the ratio of war taxes to war expenditures of France amounted to about 1 per cent. The total taxes raised during the war did not greatly exceed the amount that had been raised in recent years of peace. The ratio of total taxes to total expenditures was 92 per cent in 1913, about 16 per cent in 1915, and about 15 per cent in 1916, 1917, and 1918. The relative total receipts from all sources of taxation, using the 1913 figures as a base of 100, were 79 in 1915, 96 in 1916, 119 in 1917, and 127 in 1918.[18] These figures indicate that France did not greatly increase her war-time revenues. The ratio of direct taxes to total taxes was about 29.1 per cent in 1913, 26 per cent in 1917, and 32 per cent in 1918. Direct taxes in France produced only a small part of the revenue. The above percentages are taken from table on page 49.

Revenues of France

in million francs

	1913	1914	1915	1916	1917	1918
Direct taxes	634	496	437	893	1017	727
Tax on war profits	....	....	....	....	193	714
Tax on intangibles	138	153	158	181	242	252
Stamps	1086	117	612	683	895	1143
Indirect taxes	903	745	714	520	692	734
Import duties	754	577	764	1556	1785	1314
Tax on sales	....	....	....	....	....	210
Monopolies	1035	931	844	943	1108	1154
Miscellaneous	539	290	270	240	254	286
Total	5089	3309	3799	5016	6186	6534

[18] Allix, E., Les Nouveaux Impots, Revue Politique et Parlementaire, March 10, 1920, pp. 431-447.

RELATIVE FIGURES
(1913 = 100)

Direct taxes	100	78	69	141	160	114
Direct taxes including war-profit tax	100	78	69	141	191	227
Total revenues	100	65	75	99	121	128

(b) *French and British Taxes Compared*—

The relatively light taxes levied in France stand out strikingly in contrast to the taxes in Great Britain. A member of the Chamber of Deputies called attention to the fact that whereas from 1914 to 1918 French taxes rose only from fr. 90 to 103 per capita per annum during the war, British taxes rose from 95 francs to 265 francs per capita per annum.[19] In 1919 the per capita tax in Great Britain was about 2.60 times as great as in France. The French taxes were not only less in amount than the British, but their distribution was quite different. The British relied chiefly on direct or personal taxes, the French chiefly on indirect or impersonal taxes.

SOURCES OF TAXATION

Source	France		Great Britain		Ratio of British to French taxes in per cent
	Million francs	Per cent of total	Million francs	Per cent of total	
Income tax	370	5.0	5,987	42.1	1620
War profits taxes	580	10.8	5,505	38.6	870
Consumption taxes	4527	84.2	2,752	19.3	61
Total	5477	100.0	14,244	100.0	260

The British total is 2.60 times as great as the French.[20]

But the British income tax yielded over 16 times as much as the French, the war profits tax almost 9 times, and the consumption taxes only 0.6 times the amount of the French taxes.

The English levied relatively few taxes but relied on high rates to yield large returns. The French hesitated to draw upon the

[19] Gide, Charles. French War Budgets. The Economic Journal, September, 1919.

[20] Paris correspondence, London Economist, November 9, 1918, p. 654.

few productive direct taxes, and resorted to numerous indirect taxes, bewildering in their variety and yielding relatively small amounts.

(c) *The Amount of War Taxes and Percentages of Total Cost*—
The total non-loan revenues of France were insufficient to pay interest on the war debt. Non-loan war revenues did not even equal the pre-war revenues.

REVENUES AND LOANS [21]

	Expenditures, million francs	Income, million francs	
August 1, 1914, to March 31, 1919	174,500	Loans	159,400
Advances to Allies	6,700	Other revenues	22,500
	181,200		181,900
Foreign debt and other items	11,000		
Total	192,200		
Annual revenues before war			5,000
Total equivalent peace revenues during war period			24,000

If monopoly and other non-tax revenue sources are excluded, total tax receipts during the war were approximately the same as normal tax receipts in pre-war years. According to Gottlieb the ratio of war taxes to war expenditures up to December 31, 1918, was 1.0 per cent, and war taxes per capita per annum equivalent to 12 cents.

The ratio of direct taxes to total taxes for the years 1913 to 1918 was as follows:

Year	Per cent
1913	29.1
1915	27.9
1916	24.2
1917	26.2
1918	32.3

[21] Peret, Raoul, President of Budget Committee; Journal Officiel Chambre, Débats, pp. 1058, *et seq.*, March 7, 1919.
Jèze, Gaston, Les Finances de la Guerre de la France, Revue Sci. Leg. Fin., xvii: 2268-298.

The ratio of direct taxes, including taxes on war profits, to total non-loan revenue was as follows:

Year	Per cent
1913	12.6
1914	15.0
1915	11.5
1916	17.8
1917	19.6
1918	22.0

(d) *Diversity of Taxes*—

Through the year 1915 the government hesitated to increase the rate of taxation or to find new sources of revenue. But as the debt charges grew an increase of taxation became imperative. In 1917 the debt charges were fr. 7,645 million and the revenues only fr. 5,415 million. France lacked a working income tax and had to resort to many other types of taxes. These were chiefly indirect, such as a tax on retail sales, stamp taxes, taxes on legal documents, liquors, luxuries, and articles of consumption. Now the policy of financing the war largely through short-term loans and bank advances led to inflation, which caused acute suffering among the poor. Sales taxes and consumption taxes aggravated their difficulty.

The use of a variety of indirect taxes has several disadvantages. They are not based on the principle of ability to pay. They are annoying and produce the impression that taxes are more burdensome than is really the case. The cost of collection of many taxes is relatively higher than the cost of collecting a few. The ultimate distribution of a limited number of taxes may be as just as that of a great variety.

(e) *Criticism of Tax Policy*—

The theory of French war finance at the outset was that the conflict would be brief and that increases in taxation should be postponed until after the war. As the war continued the weak tax policy reacted unfavorably on the issue of loans. Because taxes were inadequate to meet the interest on loans, French credit declined even at home and the government had to offer special inducements to insure the success of the war loans. Furthermore

the delay in introducing new taxation during the war made it impossible to recast the tax policy during the period of readjustment following the cessation of hostilities. As a result the state was unable to rely either on loans or on taxes and had to resort to borrowing at the Bank of France, which served to aggravate the difficulties of the period of readjustment. By that time the fiscal problem had become so serious that even heroic taxation afforded no solution of the problem of reducing the floating debt, and of retiring the excessive note issues of the Bank of France.

The timidity in taxation prevented the building up of an effective machinery of administration. Laxity and fraud in the making of returns was common. According to the British Ambassador at Paris "the *impot cedulaire* on wages brought in less than half the figure it ought to yield. The majority of workmen have torn up the notices sent to them and not one of them has been prosecuted. And again in the case of the general income tax, only 500,000 persons were assessed during the past year although in theory it is payable by everyone who earns more than fr. 3,000 a year and should obviously be paid by nearly everybody, since there is no workman or small tradesman in any town who does not make more than ten francs a day."[22]

(f) *An Apology for the Tax Policy*—

In criticising the French tax policy, several mitigating circumstances should be borne in mind. The income tax had been introduced just before the beginning of the war, and it had not been possible to perfect the methods of administration. The declaration of a moratorium suspended the receipt of many incomes on which taxes might have otherwise been collected. The invasion of northern France affected the most productive area, which furnished over 15 per cent of the revenue. Again the proportion of mobilized men was 89.3 per cent of the total male population between the ages of twenty and forty-seven. The eight million men who were mobilized were entitled to postponed payment of any taxes to which they were subject. This privilege was granted also to the inhabitants of the invaded areas and of the area of military occupation and to landlords who could not collect rent on account of the moratorium. The tax collectors themselves were mobilized

[22] British Board of Trade Journal, May 6, 1920, pp. 603 to 605.

so that the tax administration became defective. The people left at home were women, children and the aged, whose income was much reduced and many of whom had to be supported on state allowances. Many of these were small investors whose income from Russian, Turkish, and other securities was completely cut off. Again wealth is distributed widely in France and the income tax would hardly reach the masses with small means, such as petty merchants, peasants, small landholders and clerks. And not least was the fact that France bore the brunt of the war and the government hesitated to impose heavy taxes for fear of breaking the morale of the people and of encouraging the defeatist element, which increased in power as the war dragged on.[23]

ii. *The Income Tax*

In spite of the opposition of the wealthy classes in France, an income tax law was passed under the budget for 1914, but the tax was not to go into effect until January 1, 1915. Immediately after the enactment of the tax law the war broke out and although French revenues in 1914 and 1915 declined below the 1913 level, the collection of the income tax was deferred to January 1, 1916. The tax affected all persons with incomes of fr. 5,000 and over, but the full rate of two per cent applied only to incomes over fr. 25,000 There were abatements for dependent children and allowances for business losses. The tax administration was so ineffective that the making of returns was practically optional. It was estimated that about 500,000 persons would pay, but the actual results showed only 165,000 returns. About fr. 2,980 million of taxable income of 1914 paid about fr. 22,250 in taxes approximately 0.75 per cent. Criticism of the results must be tempered by the fact that the tax was an untried experiment which took place under war conditions.

On July 1, 1916, the tax on income from securities was raised from 4 to 5 per cent and the tax on income from foreign securities was likewise increased. As a result of the experience with the first

[23] Gide, Charles, French War Budgets. The Economic Journal, September, 1919. Casenave, Maurice, Inflation and High Prices, Proceedings of the Academy of Political Science, June, 1920, p. 99. British Board of Trade Journal, May 6, 1920.

Bloch, Jean, The Financial Effort of France During the War, The Annals of the American Academy of Political and Social Science, lxxv, 164, January, 1918, p. 204.

income-tax returns, the rates were raised and the administration was improved. The lower limit of taxation was reduced from fr. 5,000 to fr. 3,000 and the rate was raised and graduated up to 10 per cent on incomes over fr. 150,000. To secure the enforcement of the tax the failure to file returns was penalized. The returns were checked and penalties were provided for the failure to explain mooted points although the taxpayer could not be compelled to produce his books.

As a result of the more effective administration of the tax, the comparative returns doubled in number and increased eightfold in yield. On July 31, 1917, the income-tax rate was raised from 10 to 12 per cent on incomes over fr. 150,000, with graduated rates on incomes up to that amount. In July, 1918, a more steeply graduated set of rates was put into effect ranging from 1½ per cent on incomes of fr. 5,000 to 16 per cent on incomes of fr. 150,000, and continuing upward to 20 per cent on incomes above fr. 550,000. The increased yield of the income tax was pointed out in a report to the Finance Committee of the Chamber of Deputies prepared by M. De Lasteyrie.[34]

INCOME-TAX RETURNS

Year of return	Date of law	Rate per cent	Taxable Income		Amount of Tax		Average tax rate per cent
			Million francs	Relative figures	Million francs	Relative figures	
1916	Dec. 29, 1915	2	5047	100	45	100	0.9
1917	Dec. 30, 1916	10	7055	140	230	505	3.3
1918	July 31, 1917	12.5	8297	164	483	1060	5.8
1919	June 29, 1918	20	8185	162	440	968	5.4

The increase in the amount of the tax is an admirable proof of the capacity for increasing the yield of direct taxation. The Act of July 31, 1917, levied a head tax of 5 francs for every person having an income. A head tax or war impost was laid on every man of military age who was not mobilized.

iii. *Profits Taxes*

An excess-profits tax law was passed on July 1, 1916, and applied to profits earned during the war and for twelve months after

[34] France's Financial Position. Board of Trade Journal, May 6, 1920, p. 603.

its close. The rate was 50 per cent upon the excess of profits over a pre-war normal which was based on the three years prior to August 1, 1914. On September 30, 1916, the rate was increased to 60 per cent on the taxable excess above fr. 500,000. On July 31, 1917, an additional tax of 4½ per cent on business profits exceeding fr. 5,000 was put into effect. There were various abatements on profits over fr. 1,500, the lower limit. At the same time a tax of 3¾ per cent applying to agricultural profits, to salaries, and to professional fees, was enacted.

Because of the extensive evasion of the excess-profits taxes, a committee of the Senate and Chamber of Deputies investigated industrial profits and reported that it would be possible to collect over a half billion francs from the war industries.[25]

iv. *Indirect and Other Taxes*

The indirect taxes yielded the largest part of the total tax revenue of France. The Act of July 1, 1916, increased import duties, particularly on tropical products, tea, coffee, vanilla, pepper, cinnamon, cocoa, tobacco, sugar, molasses, etc. Luxury taxes were levied upon the use of horses, carriages, automobiles, clubs, upon hunting, billiards, and upon admission to theaters, cinemas, and other amusement resorts. Excise taxes were imposed on mineral waters and alcoholic drinks. Rates were increased on state monopolies, telephones, telegrams and postal service.

The same act imposed a tax on retail sales amounting to 0.1 per cent on sales of one million francs per annum up to 0.5 per cent on sales of over 200 million francs. The sales tax was increased in 1918. In March, 1918, additional consumption taxes were put into effect, including a tax of 0.2 per cent on the retail price of all luxuries costing fr. 150 or more and in addition a tax of 10 per cent upon the retail price of any article designated as an article of luxury and upon expenditures made in so-called luxury establishments. The luxury taxes were subsequently modified as a result of much opposition.[26]

[25] November 1, 1919.

[26] Jèze, Gaston, Les Finances de Guerre de la France, Revue de Science et de Législation Financières, 1919; xvii: 3, pp. 268-314, covers budget proposals, criticism and legislative debates.

D. The Post-War Budget

i. *Sections of the Budget*

The French budget consists of three parts, the ordinary, the extraordinary, and the special section. The ordinary budget covers the normal and permanent expenditures of the government. This budget is met by taxation. The extraordinary budget provides for charges of a temporary nature, due to the liquidation of war-time obligations. It is temporary and ceases to exist after these obligations are met. The extraordinary expenditures are covered by loans and by the liquidation of war stocks. The third section of the budget covers expenditures which under the treaty are recoverable from Germany, such as the reconstruction of the devastated areas of France, and pensions to the incapacitated, to widows and to orphans. These items are charged to an account of expenditures recoverable through payments to be received upon the execution of the Treaty of Peace. These are regarded as temporary burdens which France expects to transfer to Germany at the earliest possible date; in the meantime France merely acts as a banker and advances credits to her nationals on account of the indemnity to be received from Germany.[27]

ii. *The Budget of 1920*

The budget presented by M. Klotz on January 20, 1920, was modified by his successor, M. Marsal, and was adopted by both the Senate and the Chamber of Deputies on July 31, 1920. It called for an expenditure of fr. 47,932 million, which is 10.1 times as great as the budget in 1913 of fr. 4,739 million. The public-debt charges in the 1920 ordinary budget are 2.5 times as great as the entire budget expenditures of 1913.

[27] M. Louis Klotz in the presentation of the budget, January 21, 1920.
M. François Marsal in a letter to the Budget Commission, April 10, 1920.
Board of Trade Journal, May 6. 1920, p. 603.
Statement of the French High Commission in the United States. February 24, 1920.
Economiste Français, January 31, April 17 and 24, 1920, pp. 129-131, 481-484, 513-515.

BUDGET ADOPTED JULY 31, 1920 [28]

Items	In million francs	Per cent of ordinary budget	Per cent of total budget
Ordinary budget:			
Service of public debt	11,633	53.5	24.2
Expenses of ministries	7,629	35.0	
For collection of public revenues and operating public monopolies	2,370	10.9	
Miscellaneous	129	0.6	
Total	21,761	100.00	45.4
Extraordinary budget	5,420	......	11.3
Expenses recoverable from Germany	20,751	......	43.3
Grand total	47,932	......	100.0

SOURCES OF ORDINARY REVENUE [29]

Items	Million francs
Direct taxes and contributions	1,923
Indirect taxes	8,484
Monopolies	1,998
War profits tax	4,000
Sales of war stores	2,915
Sundries	2,450
Total	21,770

The extraordinary budget receipts are taken from loans made in 1920.

The ordinary budget for 1920 is 4.6 times as great as the budget for 1913. The item, "service of public debt," in the 1920 budget is 9.0 times as great as in the 1913 budget. The expense of ministries in the 1920 budget is 2.2 times that of the 1913 budget.

The ordinary budget for 1921 was slightly larger than in 1920.[30]

[28] Source: Journal Officiel, August 1, 1920, pp. 10,947–11,003.
[29] *Ibid.*
[30] L'Exposé des motifs du Budget de 1921. Economiste Français, November 13, 20 and 27, 1920, February 12, 1921.

BUDGET FOR 1921
(in million francs)

	Expense	Revenue	Surplus	Deficit
Ordinary budget	22,327	22,335	8	
Extraordinary budget	5,499	2,628	....	2,871
Expenses recoverable from Germany	16,575	0	....	16,575
Total	44,401	24,963	....	19,438

The largest item in the 1921 budget is the service of the public debt, amounting to fr. 10,244 million or 41 per cent of the total, and the next largest is the military expense of fr. 4,613 million or 21 per cent of the total, larger by fr. 1,097 million than in 1920. In addition the extraordinary budget shows a military expenditure of fr. 2,814 million or 51 per cent of the total of which more than half covers operation abroad in Syria, Cilicia, and Morocco. The deficit in the extraordinary budget is about equal to the military expenditures—a telling comment on the relations of finance and politics.

For comparison the pre-war budget is given herewith:

BUDGET OF 1913

Items	Million francs		Per cent
Branches of expenditure:			
Public debt		1286	27.1
Expenses of the Ministries of War and Marine		1450	30.6
Other ministries		2002	42.3
Total		4738	100.0
Sources of revenue:			
Direct taxes		622	13.1
Indirect taxes		2649	55.9
Registration	778		
Customs	625		
Indirect contributions	678		
Taxes on bourse operations, on sugar, stamp taxes, etc	568		
Monopolies		969	20.4
Tobacco	510		
Posts, telegraphs	385		
Sundries		499	10.6
Total		4739	100.0

iii. *Tax Increases*

The tax law of June 25, 1920, provided for a substantial increase in taxation. The war profits tax of 50 per cent on the excess over pre-war profits was abandoned. A series of direct taxes, including special and general income taxes, provided for increased revenue. Business profits in excess of fr. 5,000 were taxed at the rate of 8 per cent, agricultural profits above fr. 4,000 were taxed at the rate of 6 per cent, and salaries and various forms of unearned income in excess of about 4,000 at the rate of 6 per cent. The income from real-estate was taxed at 10 per cent, subject to specified abatements. The income from mines was taxed at the rate of 20 per cent.

The general income tax of 1917 was levied on all incomes in excess of fr. 3,000 over and above allowances for dependents. The rates ranged from 1¼ per cent of the taxable income between fr. 3,000 and fr. 8,000 up to 11¼ per cent on the excess over fr. 150,000. The law of 1920 increased the exemption limit as well as the allowances for dependents. But the rates ranged from 2 per cent on portions of incomes between fr. 6,000 and fr. 20,000 up to 50 per cent of that part of the income exceeding fr. 550,000. An estate tax, applicable only if there were three children or less, ranged from ¼ of 1 per cent to 3 per cent on estates of fr. 2,000 or less up to 7½ to 39 per cent on the fraction exceeding fr. 500,000 depending on the number of children. In addition the heir must pay an inheritance tax ranging from 1 per cent to 59 per cent depending upon the amount of the inheritance and the degree of the relationship, subject to the limitation that the combined estate and inheritance taxes shall not exceed 80 per cent of the value of the property received by any heir.

Of the indirect taxes the tax on sales is the most important, levied at the rate of 1 1/10 per cent on the net sales of merchants and on the gross profits, commissions, interest and other charges of bankers and brokers. Several transactions were exempt such as dealings in bread, in products under a state monopoly, or in service under franchises, dealings by brokers whose charges are fixed by law, and dealers in commodities or services paying the luxury tax.

In addition there were enacted a great number of indirect taxes, such as stamp taxes on legal papers, the transfer of securities or of

personal property or real-estate. Excise taxes were levied on wines, liquors, beers, mineral waters, and playing cards. Consumption taxes were levied on tea, coffee, sugar, cocoa, and spices. The luxury taxes covered a long list of articles. There were taxes on automobiles, carriages and motor boats. Places of amusement such as music halls, moving picture houses, theaters were taxed on the gross receipts at rates ranging from 6 per cent to 25 per cent.[31]

France made earnest efforts to increase her revenues, and the tax statistics indicate progress in this direction. The returns for the first seven months of 1919 were fr. 975 million in excess of the estimates and fr. 2,000 million over the yield for the corresponding period for 1918. The amount of taxes collected in 1919 exceeded those of 1918 by substantial percentages as follows: For the month of April, 25 per cent; May, 22 per cent; June, 20 per cent; July, 30 per cent; August, 19 per cent, and September, 32 per cent. The yield from indirect taxes and monopolies for June, 1920, was fr. 908 million, an amount 30.6 per cent in excess of the estimates and 29.6 per cent above the June, 1919, figures. The returns for the first six months of 1920 were fr. 1,635 million in excess of the estimates and almost fr. 2,000 million above the 1919 figures for the corresponding period.[32]

The increase of taxes in 1920 over 1919 per individual is an indication of France's effort to balance her budget. According to an estimate prepared by the French Minister of Finance, the total taxes paid on an income of fr. 260 thousand would amount in 1919 to 25 per cent, and in 1920 to 42 per cent. By the same estimate an individual income of fr. 600 thousand would have paid in 1919 28 per cent and in 1920, 61 per cent. A person with an income of fr. 50 thousand, would in 1919 have paid 15 per cent and in 1920, 22 per cent. The corresponding taxes in the United States were considerably lower in both years. These estimates are not absolutely accurate for the rate per individual, but they serve to indicate France's effort to increase taxes.

The increase in the national revenue in 1920 arose chiefly from indirect taxes. To meet the ordinary budget the following schedule of increased taxes has been put into effect as of July 1, 1920:

[31] Journal Officiel, June 26, 1920, pp. 8990–9005; also Economiste Français, July 3, 10, 17, 24, 31, 1920; pp. 7, 39, 71, 103, 137.

[32] Economiste Français. Le Rendement des Impôts. Reported monthly.

Taxes	Million francs
Income taxes	1,300
Tax on wealth	500
Sales tax	5,400
Excise tax	950
Better tax administration	350
Total increases	8,500
Old schedules in 1920	11,500
Grand total	20,000

The budget revenue, however, was not realized with respect to many of the taxes. For instance the sales tax which was to have yielded fr. 460 million per month produced only fr. 234 million or 51 per cent in September, 1920, fr. 203 million or 44 per cent in November, 1920, and fr. 152 million or 33 per cent in February, 1921. In a period of declining prices, revenues based on selling prices must decline. Except for the indirect taxes and monopolies the several items of the budget yielded less than the estimates, particularly in the case of direct taxes. For the year 1920 the taxes collected amounted to 81 per cent of the estimates, and if the arrears be included to 91 per cent of the estimate.

ESTIMATED AND ACTUAL REVENUE FOR 1920

Source	Estimated revenue, Million francs	Actual revenue, Million francs	Per cent of actual to estimated revenue
Direct taxes and contributions	1,923	757	39
Indirect taxes and monopolies	10,482	12,060	115
War profits	4,000	2,393	60
Sales of supplies	2,915	1,650	56
Sundries	2,450	727	30
Total	21,770	17,587	81
Arrears	0	2,247	10
Grand total	21,770	19,834	91

E. Appraisal of French War Finance

i. *Facts*

The pertinent facts concerning French war finance, given in this chapter, stand out clearly. The percentage of total expenditures raised by taxation was very low. The needs of the war were met largely by loans and advances from the Bank of France. Loans were raised abroad to a considerable extent. Of the internal loans, a very large percentage were short-term or floating.

The war was financed originally by means of advances from the Bank of France, followed by the issue of short-term domestic obligations, which were subsequently funded by long-term loans raising little new money. When the domestic credit supply proved inadequate, France raised some short-term loans abroad and later issued several external long-term loans, originally unsecured, and subsequently secured. The problem of financing the war became acute just before the United States entered the war. Government advances by the United States temporarily solved the fiscal problems of France. For almost a year after the armistice advances by the United States continued. The internal financial policy of France after the armistice depended almost entirely upon the further issue of short-term funds and further Bank advances.

ii. *The Effects of French Financial Policy*

(a) *Bank of France Advances*—

Because of the reluctance to raise money by extensive taxation during the war, France resorted to the policy of inflation. Notes issued by the Bank of France were not very different from fiat money printed by the government. The Bank of France not only advanced notes to the state, thus producing an inflation of the currency, but furthermore it discounted the ever-increasing volume of treasury bills and thus produced an inflation of credit. As a result the cost of living in France rose more rapidly than in either England or the United States, where a vigorous tax policy was followed. Consequently the value of the franc declined in those countries where the currency had not depreciated to the same extent. The foreign exchange rates on France became increasingly unfavorable. In the policy of financing the war by inflation lay the cause of most of the post-war financial difficulties of France.

(b) *Short-Term Loans*—

In order to resort to extensive short-term financing, the legal limit on the issue of treasury bills was raised, again and again, whenever it was found convenient to obtain money through short-term obligations. As the volume outstanding grew, the Treasury found it increasingly difficult to raise funds and resorted to all sorts of devices such as the payment of interest in advance, the extension of the privilege of redemption at the option of the holder at the end of any interest period, and the payment of a bonus of a half year's interest if the investor did not exercise the option before maturity. As the ratio of unfunded debt to the total debt increased, the government found the maturing short-term debt unmanageable and renewals had to be made at ever-increasing rates of interest. During the last year of the war a long-term loan could hardly be raised, and treasury bills, Bank of France advances, constituted the chief reliance during 1918. The French followed a hand-to-mouth policy. Opportunism rather than foresight was its guiding principle.

(c) *Long-Term Loans*—

The failure to develop vigorous measures of taxation reacted to the injury of the loan policy. Probably the most serious mistake, from the point of view of after-war taxation and the balancing of the budget, was the exemption from taxation of income from war loans. It is not quite correct to say that the French internal debt constitutes no burden because "what the government takes out of the pockets of the French holders in taxes to pay the interest on its bonds, it returns to their pockets in the interest that it pays them. Figures for the income of the people and figures for the budget of the state are thus swollen by what is after all merely a transfer of funds."[33] Quite the contrary is true. The burden of interest payable by the state is increased, because the state has forfeited the right to tax the income on war loans, or because of a weak tax policy has had to bargain it away.

Another indication of the effect on long-term loans of the opportunist fiscal policy was the increasing discount on bonds issued. According to Gide, the average price at which French bonds were floated was about 76, or 24 points below par. If the bonds are

[33] Anderson, B. M. Effects of the War on Money, Credit and Banking in France, p. 103.

perpetual, the only effect of the discount is to make the return higher than the rate of interest. But if, as is likely, the state will exercise the option of redemption after 1931 or 1943, it will have to pay about fr. 20,000 million in excess of the monies received by it, making the yield of the loans considerably higher.

The long-term loans raised new money only in part. They made possible funding operations and the decrease of the floating debt and to some extent the temporary reduction in the aggregate Bank of France advances. In the later loans, subscriptions were accepted in the form of loans already outstanding and bearing a lower rate of interest. Thus, interest charges were increased, but no fresh funds were raised. Again, after the situation in Russia became chaotic, France accepted matured Russian interest coupons in payment of subscriptions to her own long-term loans. The right of conversion of loans into later issues was maintained practically throughout the war, thus raising the rate of interest. This was not true either in England or the United States. Because French credit was not supported by a consistent policy of taxation, the government had to offer all sorts of inducements to secure subscriptions. Long-term securities were receivable for excess-profits taxes, which were intended to meet current expenses. To make ten-year loans acceptable, they were sugar-coated with features of short-term loans giving the holder an option to redeem at any interest date, and the interest on them was paid in advance. To induce buyers to hold the bonds, premiums were offered on redemption on a scale increasing annually to maturity.

The percentage of foreign debt increased as the war continued. In the mobilization of her securities for the purpose of obtaining further loans abroad, the French Treasury had to offer more favorable terms than the British did. To cap the climax, French credit had so deteriorated by the end of the war that the Crédit National found it necessary to resort to a lottery loan in spite of the government guarantee of interest and principal. Under its provisions a fifty franc bond might have the chance weekly of drawing fr. 1,250,000 as a prize. The premium bonds were traded in on the London Stock Exchange shortly after issue but dealings in them were declared illegal under the anti-gambling act of Parliament of 1823. In the loan issued November, 1920, interest-bearing certificates for small amounts were issued in currency size to circulate as money and bear interest at the same time.

The unhappy experience of the United States in the American Revolution and the Civil War seemed to have failed as a deterrent.

(d) *Taxes*—

The chief defect of the tax policy during the war was the lack of a broad basis of taxation and the need for resorting to a multitude of diverse taxes each yielding relatively little. During the war France raised a smaller percentage of her war expenditures by war taxes than any of the other major belligerents. France relied chiefly upon indirect taxes. Because of the lack of an effective and well administered income tax the treasury was hard pressed to find new and productive sources of revenue. On the whole the tax policy was weak, one-sided and unproductive. The inflation of currency and credit caused a rise in prices, which in effect constituted a reduction in purchasing power or a steep and ungraduated income tax on all, poor or rich. This grave injustice was aggravated by the levying of consumption taxes which further increased the cost of living. This increase was in proportion to the size of the family and defeated the measures to increase the population. The sales tax, the mainstay of post-war fiscal policy, is unreliable because its yield declines as prices fall after the war. The tax policy of France was economically unsound and politically undemocratic.

(e) *Change of Fiscal Policy*—

Like the United States in the War of 1812, France had to change her policy in the middle of the war. The original policy, if there were any such, had broken down. France had expected to finance the war by loans and Bank of France advances and to resort to taxation after the war. She reversed this policy and undertook to introduce extensive tax measures from 1916 onward. The long continuation of the war had exploded the original theory of finance adapted to a short war.

iii. *The Causes of the Difficulty*

(a) *Bad Pre-War Situation*—

France did not choose a policy of war finance, it was thrust upon her by the consequences of her pre-war policy. The French theory of a perpetual debt, as a source of investment for the savings

of her population, has proved a danger and a stumbling block in national finances. For forty years before the war, administration after administration lacked the courage to deal with the debt, left as a legacy of the Franco-Prussian War. The pre-war fiscal situation in France was not sound. To balance the budget a loan was floated. To meet current expenses for the army and navy, it was necessary to issue a loan of about fr. 900,000,000. The war broke out while the installments on this loan were being paid. France's tax system before the war was inequitable. There was relatively little direct taxation as in Great Britain. There was less taxation graduated in accordance with ability to pay. The application of the principle of ability to pay is not only sound ethically and politically, but it is practical economically for when taxes must be promptly increased, a rise in the rates applicable to the wealthy classes in the simplest, surest, and quickest way of increasing government revenues. The system of taxation in France before the war was inexpansible. When the income tax law was finally passed, in spite of the opposition of the wealthy classes, there was little opportunity to perfect the details of administration before the war broke out and exposed the defects in the pre-war scheme of taxation.

(b) *The Theory of a Short War*—

The theory of French finance was that the war would last a short while, and that therefore short-term loans and advances from the Bank of France would afford adequate temporary financing. Permanent fiscal measures were to be enacted after the war. France's fiscal policy probably would have worked in a short war, but certainly no better than the British or the American program did. However, continuation of the war broke the scheme. French finances were saved by American intervention. The justification of the French program by Charles Gide, Maurice Casenave and J. Frederic Bloch must be followed sympathetically by a world that has seen France bleed and suffer grievously. But why should not the faulty financing during the French revolution and the makeshift financing in the United States of the American Revolution and of the War of 1812 have furnished adequate historic examples of a policy not to be followed?

As a consequence of the short-war theory of finance, the government found it necessary to meet the burdens of the transition period

without resort to additional taxes or to long-term loans. Financing during the year after the war was effected by a large increase in the floating debt and an increase in the issue of bank notes,—two factors resulting in a rapid rise in prices. On the theory that the Government was to give industry and commerce an opportunity to resume its pre-war status, without the obstacles of increased taxes or of a big funded loan, the credit pyramid was rendered more unstable. The fallacy of the policy became apparent at the end of the year and the country insisted upon the application of sound fiscal principles.

iv. *The Remedy*

A history of what France did financially during the war makes the remedy obvious—a reversal of the war policies is the logical course. The country must retrace its steps. It must reduce the bank advances, it must fund the floating debt, it must make provisions for sinking the war loans. How may this be done? On the assumption that the condition is not beyond remedy, there must be further progress along the sound and sane lines which were adopted in the middle of the war,—an increase of direct taxes based on the principle of ability to pay. The war profiteers must be made to pay to the limit the expenses of the war. Perhaps some legal method might be devised to restore to the state the right to tax incomes on internal loans which it so thoughtlessly forfeited during the war. Then, only, will payment on the internal debt become a bookkeeping transfer of funds. France, crushed but not broken, has made remarkable progress toward industrial recovery and fiscal reform. Applied to her fiscal problems, the courage and the resourcefulness she displayed during the war will surely solve her financial problems in the future.

v. *The Outlook*

(a) *The Indemnity*—

The estimate of war damages varied considerably. Deputy Louis Dubois reported that the damage done to the invaded departments amounted to fr. 119,000 million, the damage to agriculture fr. 37,000 million and military expenses, pensions, etc., fr. 44,000 million or a grand total of fr. 200,000 million.[34]

[34] In Economiste Français, March 8, 1919, p. 301, a low estimate is made of fr. 119,801 million.

On the other hand René Pupin, a noted economist, estimated the property loss in the invaded regions at about 15,000 million to 20,000 million francs, and J. M. Keynes, representing the British Treasury at the Peace Conference, independently estimated the damage at about fr. 12,500 million.[85] Mr. Pupin also adds the loss of foreign investments, losses of rolling stock, ships and livestock, and the loss of the annual savings and arrives at a grand total loss of 77,000 million to 87,000 million francs. The estimate of the French section of the Reparation Commission for war damages in France was fr. 62,043 million. In contrast with these figures is the German estimate of the indemnity due to France of approximately mk. 7,228 million, submitted in a statement by Ex-President Poincaire, head of the French section of the Reparation Commission.[86] The amount of the indemnity was fixed at mk. 132,000 million, of which France was to get 52 per cent.

The immediate financial outlook in France depends upon the amount realized on the indemnity. The terms of the Treaty of Peace, if they could be carried out, would assure a bright future and a speedy recuperation of France. Under the financial clauses of the treaty France was to obtain before May 1, 1921, in addition to the railway materials, agricultural appliances, and other property conveyed as restitution, a part of the mk. 20,000 million in gold demanded of Germany, a portion of an issue of gold bonds of mk. 40,000 million bearing 2 per cent interest, a part of the German ship tonnage and of the German stocks of dyes, a part of the 7,000,000 tons of coal to be conveyed annually for a period of ten years, the repayment of the cost of the army of occupation, a proportion of the German interests in Russia, the right to sequester all German property in Morocco, and a mandate over a part of the German colonies. Alsace-Lorraine was returned to France free of all debt. After May 1, 1921, France was to have the right to claim full reparation for all damage done to property in France during the war, and the payment of the cost of all pensions and soldiers' allowances. On the other hand, Germany was to make formal acknowledgment of the reparation debt to the Allies, was to forfeit the right to dispose of her gold, and was to denounce all treaties

[85] Keynes, J. M. Economic Consequences of the Peace, pp. 124, 127. René Pupin, Economiste Français, October 19, 1918.

[86] Le Matin, August 2, 1920.

concluded by her prior to 1914 and to enact legislation to facilitate the execution of the treaty.[87]

The future of France depends upon the extent to which the Allies help her rebuild the devastated areas. This is a just and undeniable claim. Many Frenchmen believe that "German obligations to France must be made negotiable by the Allies before Germany actually pays, else all the taxation of Frenchmen to the limit and the issue of French loans to the limit will not put France on her financial feet again." Two unsuccessful bids for inter-Allied coöperation were put forward at the Hythe Conference. On May 16, 1920, the suggestion was made that the French debt to the United States be transferred to Germany partly by the issuance of German bonds to the United States. This tentative plan was abandoned owing to the lack of consent of the United States. A proposal of a loan based on the German debts and underwritten by the United States and Great Britain also failed of acceptance.

In spite of the obvious difficulty Germany is having in solving her own financial problems and of her present inability to pay any substantial indemnity to France, the French still count on large German indemnity payments. Almost half of the 1920 budget, fr. 22,000 million, consists of "expenses recoverable under the Treaty of Peace." If Germany does not pay, the recuperation of France will be a very slow process.

(b) *The Future Budget—*

The so-called ordinary budget for the year 1920 calls for revenues of about fr. 22,000 million, the extraordinary budget for fr. 5,000 million, and the special budget for the rebuilding of the devastated areas, etc., for about fr. 20,000 million. The revenue for 1920 failed to meet the ordinary budget, that is the normal and permanent expenditures. Charles Gide, in the Economic Journal for September, 1919, estimated that the future normal budget would be fr. 22,000 million, exclusive of the sinking-fund requirements. The extent to which this charge would increase the budget depends upon the rate of conversion of the loans and upon the amortization of the debt of over fr. 200,000 million. There may be some reduction in the ordinary budget as time goes on, for

[87] Finance Minister Klotz in the Chamber of Deputies, in debate on the ratification of the Treaty of Peace, September 15, 1919.

the Ministry of Finance appointed a Committee of Inquiry, the aim of which is to help reduce public expenditures, within the limits of available revenues, if possible.[38] Again as deflation sets in, the state can dispense with subsidies to lower the cost of living. In the three years 1917–1919 the wheat subsidy amounted to fr. 4,500 million and in 1920, owing to the fall in the value of the franc, the bread subsidy amounted to fr. 3000 million. As a result of increases in taxation France probably will be able to find sufficient revenue to meet the so-called ordinary budget in the future.

In the words of the chairman of the French Budget Commission, "if the Allies did not leave France to bear the expenditure chargeable to Germany, France would experience no serious financial difficulties in years to come, provided that the ordinary budget was immediately adjusted by means of taxation and economics."[39] According to Senator Andrë Chéron, "it is a question of life and death for France. If Germany does not pay the problem is insoluble."[40] Ex-President Poincaré said equally bluntly, "if France does not obtain financial reparations next year, she runs the risk of bankruptcy."

(c) *The French Diagnosis*—

The French have not hesitated to face their financial situation. M. Peret, chairman of the Budget Commission of the Chamber of Deputies, stated this situation candidly,[41] "Where are we going to get the money? All we know is the total of the bill. The Allies will aid us when they are convinced that we are determined to demand sacrifices of the French people. The success of our financial arrangements with England and America depends upon the reshaping of our internal finances."

The Minister of Finance, M. François Marsal, in an address to the Chamber said, "Despite our efforts, there is a feeling of distrust abroad about our power to restore the national finances. This mistrust is responsible for the high rate of exchange. Nations which never doubted our ability to win the war are now doubting whether we shall win the economic struggle which began at the

[38] A decree of March 14, 1920.
[39] Journal Officiel, Chambre, April 10, 1920.
[40] Journal Officiel, Sénat, March 17, 1921.
[41] See also Allix, Edgard, De l'urgence d'un programme financier et économique. Revue Politique et Parlementaire, Feb. 10, 1920, pp. 291 *et seq.*

signing of peace. Foreign treasuries are closed to us and we can not consider the possibility of raising an important loan abroad." [42]

M. Paul Doumer, in a report to the Senate in behalf of the Commission on the Budget, May 18, 1920, called attention to the fact that the government had done nothing to improve the critical financial situation. "It has lived, ever since the termination of the war, on the glory of France. The world has entire faith in France but is losing confidence in her administration." [43]

(d) *The American View*—

With sentiments of generosity toward a brave and suffering people, many American observers stressed the psychological traits of the French as a sure factor making for the restoration of her pre-war economic prestige.[44] In the words of an authoritative writer on financial problems, "How will France emerge from the terrific economic strain of the present war? On that question we have some historical precedent to guide us. France, three times in the past two centuries, has been completely defeated and left in a state of seeming economic exhaustion—at the end of the long campaign of Louis XIV, the final overthrow of Napoleon, and at the crushing climax of the Franco-Prussian conflict. After each of these experiences, the world witnessed the extraordinary spectacle of France promptly resuming her place in the economic system, and in the end displaying a tangible economic power even greater than before. It is impossible that this should have occurred without the possession of the national qualities of which her enemies have failed to take account. If so, it is difficult to imagine the France of the longer economic future occupying in the economic system any different position than she has occupied in the past." [45]

The friends of France do her an ill turn in veiling the truth. The defeat of France in the Napoleonic Wars marked the final surrender of world supremacy to England, after a struggle lasting half a century. After the Franco-Prussian War, France yielded

[42] Economiste Français, January 29, 1920.

[43] See also Raffalovich, Arthur, Des dettes d'Etat et de leur liquidation, Les Discussions de la Société d'Economie Politique de Paris, Jan. 5, 1920.

[44] Laughlin, J. Laurence, Credit of the Nations, New York: Scribners, 1918, pp. 193, 196.

[45] Noyes, A. D., Financial Chapters of the War, New York: Scribners, 1916, pp. 205–6. It should be noted that this was written early in the war before the debt grew so large.

second place to rapidly growing Germany. The outcome of the World War is in doubt. France and Germany as well, face the relentless natural law that wars, frequent or long protracted, debilitate a nation. History is strewn with the wrecks of exhausted military powers.

With a supreme national effort, France will undoubtedly revive. She needs, primarily, peace, prolonged peace. Further she must increase her population, and not rely on foreign alliances, or on militarizing her African colonials to redress the imbalance of population in Europe. She must invest her savings, not in second-rate governments but in developing domestic industries, and stimulate essential rather than luxury production. As her publicists, Victor Boret, Edouard Herriot and Henri Hauser have pointed out, France must apply the principles that changed Germany from an inferior power in 1870 to a dominant factor in world politics in 1914.

Many of the optimistic forecasts failed to take into account that a large part of the French debt is held abroad, that a large part of the remainder is a floating debt, and that the income of internal war loans is exempt from taxation. And even if the income from war loans were taxable, the redistribution of taxes in the form of interest is always a difficult and sometimes a wasteful economic process. Furthermore as the enormous note issues of the Bank of France are retired and deflation sets in, the burden of the debt, that is the cost in goods, will increase unless the debt is converted and the interest reduced. Some Frenchmen pointed to the remarkable expansion of the United States after the Civil War.[46] However, they overlook the fact that the South, lacking financial help, had barely overcome the effects of the war after a generation, and that the North thrived only because of the opening of the agricultural west to the great migrations of European peoples. Without financial help, France like our South will recuperate slowly and even then her recovery will be conditional on an increase of population. The colonial empire of France, with its black inhabitants, has not the inherent potentialities of development of our western states, which became peopled with vigorous white stock.

However, the record of France in the year after the war is

[46] Casenave, Maurice, The French Situation, Proceedings of the Academy of Political Science, iv. 1: 104, June, 1920.

an earnest of her future recovery. The rapid increase of tax revenues, the speedy restoration, under great difficulty and without well-deserved assistance, of her agriculture and industry, the amortization of over fr. 2,000 million since the armistice, indicate the possibilities for improvement, if the French but will it. Under a vigorous ministry, the financial situation may be improved by a heroic liquidation of the inflated currency, by a funding of the floating indebtedness, and by the adoption of a scheme of direct taxation which will be imposed in accordance with the ability to pay and therefore in proportion to the productivity of the source. Perhaps the realization of the futility of the hope of obtaining the expected huge indemnity from crushed and impoverished Germany will be the first step toward developing that self-reliant financial policy in France which is the basis of all credit and is essential to the salvation of any nation.

A very sober prognosis was given by a noted French economist at the conclusion of a study of French war finance. "The financial and economic future of France is gloomy. But the vigor of the French people is great, as their history shows; and their spirit of economy and thrift is traditional. In spite of the enormous difficulties which seem to stand in the way of her recovery, the French nation will come out of the terrible trials she has experienced, triumphant. That triumph, no doubt will be a matter of many long years."[47]

[47] Jèze, Gaston, The Economic and Financial Position of France in 1920, Quarterly Journal of Economics, XXXV: 1, February, 1921, p. 210.

CHAPTER IV

GERMAN PUBLIC FINANCE[1]

A. Cost of the War and Public Debt

i. *National Wealth and National Debt Before the War*

In view of the fact that the debt of Germany after the war constitutes over 60 per cent of the money estimates of national wealth of Germany before the war, the pre-war estimates are of interest. In 1911 Helfferich, the former Minister of Finance, and Ballod, a noted statistician, independently set the amount at about mk. 360,000 million.[2] J. C. Stamp, the English statistician, accepts Helferrich's figure.

At the outbreak of the war, Germany had the lowest debt of any of the major belligerents then engaged, approximately $17.00 per capita. The figure for the United States in 1917 was $11.33 per capita.

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Deutscher Ökonomist.

[2] Helfferich, Karl, Deutschlands Volkswohlstand, 1888–1913. Berlin: G. Stilke, 1913.

The low per capita debt of Germany, compared to the other powers, was due to the comparatively recent birth of the Empire. However the increase in the debt was not insignificant in the generation before the war. After 1886, when certain expenses could no longer be met out of current revenue, they were separately stated, as an extraordinary budget, and were covered by borrowing. The subsequent growth of the imperial funded debt was rapid. But as productive assets were acquired by the state, the debt was less of a burden than it would seem. In fact, profits on government owned railroads were sufficient before the war to pay the interest and sinking fund charges on the entire imperial debt.

IMPERIAL FUNDED DEBT [8]

Year	Total, million marks	Per capita, marks
1877	72.2	1.66
1881	267.8	5.90
1891	1317.8	26.56
1901	2395.7	42.29
1908	4003.5	63.78
1913	4802.2	70.75

Owing to the federal form of organization and to the inadequacy of imperial revenues, the states contributed out of their revenue to the budget of the empire from 1872 to 1878 and again after 1899. The debts of the states and municipalities of Germany also grew rapidly before the war.

IMPERIAL STATE AND MUNICIPAL DEBTS

(in million marks)

Year	Empire	States	Municipalities	Total
1881	268	5,244	772	6,284
1908	4003	14,362	5,296	23,661
1913	4802	17,700	11,900	34,402

[8] Hirst, F. W. and Bastable, C. F., *ibid.*
Wurm, E., Die Finanzgeschichte des deutschen Reichs, 1910.

ii. *The War Debt of the States and Cities*

The constitutional division of powers between the Empire and the federal states denied the Imperial Government the right to levy an income tax, and many expenditures for national purposes were borne by the federal states and cities, such as the cost of social service during the war. Up to the end of 1916 eight Saxon cities had incurred a war debt of about mk. 250 million, and the war expenses of the cities of Saxony having more than five thousand population amounted to about mk. 400. Leipzig alone had spent over mk. 100 million for war relief up to the first of October, 1917. As a result of the increase of the local debts, state and city taxes were heavily increased, and in some cases it was necessary to raise the tax limit in order to meet debt charges. Even during the war, the cities had been urging the assumption of their debts by the Empire and in view of the fact that the new constitution grants the Empire the right to levy an income tax, in competition with the federal states and cities, the pressure for the assumption of local debts by the Empire is increasing. Discussion of the debt of Germany should therefore take into account the debts of the municipalities and of the federal states as well as of the Empire.[4]

iii. *The Growth of the Debt*

The expenditures of each year increased as a result of the larger scale of operations and of the depreciation of the currency. The expenditures during the war were given by Dr. Schiffer, Minister of Finance, in an address to the German National Assembly at Weimar, February 15, 1919:

Year	Million marks
1914	7,500
1915	23,000
1916	26,600
1917	39,500
1918	48,500
Total....	145,100

[4] Leipziger Neueste Nachrichten, January 15, 1918. Also Laughlin, *ibid.*, pp. 263-4.

In addition mk. 6,000 million of treasury bonds were issued and mk. 9,500 million of credits were extended to the allies of Germany, making a total of mk. 160,600 million up to the end of 1918.

The rate of increase may be seen from a table of average monthly war expenditures given in marks as well relatively:

AVERAGE MONTHLY WAR EXPENDITURES

Period	Million marks	Relative figures
Aug. 1, 1914–June 30, 1915	1675	100
July 1, 1915–June 30, 1916	2008	120
July 1, 1916–June 30, 1917	2867	171
July 1, 1917–June 30, 1918	3908	233
July 1, 1918–Dec. 31, 1918	4358	260

By the autumn of 1918 mk. 139,000 million were voted in twelve war credits, as follows (the revolution in November, 1918, prevented the passing of the vote of credit of mk. 15,000 million, proposed in October):

WAR CREDITS VOTED AUGUST, 1914, TO NOVEMBER, 1918

No.	Date of vote	Million marks
1	Aug. 1, 1914	5,000
2	Dec. 3, 1914	5,000
3	Mar. 22, 1915	10,000
4	Aug. 31, 1915	10,000
5	Dec. 24, 1915	10,000
6	June 9, 1916	12,000
7	Oct. 30, 1916	12,000
8	Feb. 23, 1917	15,000
9	July 7, 1917	15,000
10	Dec. 1, 1917	15,000
11	Mar. 10, 1918	15,000
12	July 4, 1918	15,000

Dr. Schiffer gave the total debt at the end of 1918, as mk. 157,700 million of which about mk. 59,000 million was floating.[5] During the year 1919 the increase in the debt was about mk. 50,000 million, entirely in the floating debt. On March 31, 1920, the funded debt of Germany amounted to mk. 92,000 million, and the floating debt totaled mk. 105,000 million, according to a statement

[5] Address at Weimar, April 9, 1919.

of Dr. Wirth, Minister of Finance, to the Budget Committee of the National Assembly.[6]

The floating debt was mk. 132,100 million on June 30, 1920, and mk. 169,000 million on October 31, 1920. The total debt on September 18, 1920, was mk. 242,700 million, made up as follows:

	Million marks
Funded debt	91,000
Treasury bills	132,300
Other obligations	19,400
Total	242,700

To this must be added the Prussian state debt of mk. 25,200 million, consisting of mk. 10,600 million of funded debt and mk. 14,600 million of unfunded debt, which the Empire assumed upon the surrender of the Prussian railways. The Empire also owed mk. 18,000 million to the states for expenses on relief and social work. The resulting grand total is mk. 285,900 million. Until the end of 1916, the floating debt was comparatively small, for it had been retired by funds raised in long-term loans. During the latter part of the war and after the signing of the armistice, the floating debt grew by leaps and bounds, because of the impossibility of raising adequate funds from the long-term loans. To the total debt must be added mk. 131,000 million to be paid to Germans as compensation for losses, such as seized property and merchant ships surrendered.

LOSSES UNDER THE TREATY OF PEACE[7]

Items	Billion marks
Surrender of the fleet	17.0
Liquidation of German property abroad	90.0
Delivery of war material	10.5
Claims under the war damage law of 1916	13.5
Total losses to German citizens	131.0

[6] Frankfurter Zeitung, Dec. 23, 1920.
London Economist, May 1, 1920.
[7] Address of Herr Wirth to Cabinet, Sep. 23, 1920.

On May 31, 1921, the imperial funded debt was mk. 78,348 million and the floating debt was mk. 400,000 million.

iv. *Total Debt Analysed*

At the end of 1918, the total debt was distributed among expenses approximately as follows:[8]

	Per cent
Military expenses	72
Pensions	18
Civil food subsidies	6
Compensation in invaded districts	3
Mobilization costs, etc	1
Total	100

To the imperial debt should be added the debt of the federal states and of the local communities which on August 1, 1917, amounted to 30,000 million marks and mk. 22,500 million, respectively.

Analysis of the Total German Debt[9]
(in billion marks)

Type	Imperial debt	State debt	Municipal debt, etc.	Total debt
Long-term	92.0	17.5	12.5	122.0
Short-term	105.0	12.5	10.0	127.5
Total	197.0	30.0	22.5	249.5

B. Loans

i. *The Theory of German War Finance*

The theory of German war finance grew out of pre-war conditions. Since the Empire lacked the legal authority to establish a broad base of taxation, the Ministry of Finance paid little heed

[8] Estimates of George Bernhard, editor of Plutus, quoted in the London Economist, July 27, 1919.

[9] Frankfurter Zeitung, May 14, 1920. Report of Consul Frederick Simpich, attached to the American Mission at Berlin, July 14, 1920.

to the development of a tax policy. Furthermore legislation enabling the Reichsbank greatly to increase its note circulation and authorizing the establishment of emergency financial institutions made reliance on inflation the favored means of financing the war. The failure to impose taxes was justified as in France on the ground that it would have a bad effect on war morale of the public. Long-term loans and note inflation constituted the chief reliance of the German Treasury.

The theories of war finance of the three major European belligerents afford some interesting parallels. Like France and Great Britain, Germany relied upon an increase in note issues. Like France, Germany expected a short war and deliberately postponed the financial adjustments until the end of the war. Neither adopted the British and American policy of "pay as you go" in part. Germany, unlike Great Britain, did not resort to heavy taxation at the beginning of the war. Unlike France, Germany did not rely on short-term financing to wage a supposedly short war. Until the fall of 1918, Germany issued long-term loans, at precisely timed intervals. She relied on short-term loans only when long-term loans could not be sold. Unlike either France or Great Britain, Germany in the very beginning of the war planned to meet her war expenses by an indemnity levied upon her enemies.

An official statement of German policy was made in two addresses by Dr. Helfferich before the Reichstag on March 10 and August 20, 1915. "The means of financing a modern war are substantially the following: First, the issue of loans; second, the use of the printing press for the issue of notes and paper money; third, a reduction of expenses, and war taxation. . . . After the conclusion of peace, we shall present to our opponents a bill for the expenses of the war, forced upon us. We do not desire to increase by taxation the heavy burden which war imposes upon our people, so long as it is not absolutely necessary. Heavy taxes on consumption or increased transportation rates would be neither reasonable nor desirable with prices at their present level. The only method seems to be to leave the settlement of the war bill to the conclusion of peace and the period thereafter. Those who provoked the war, and not we, deserve to drag through the centuries to come the leaden weight of these billions."

ii. *The Mobilization of Credit An Accessory to the Loan Policy*

In order to avoid a moratorium, and the consequent disorganization of the finances of the country, Germany relied upon fiat currency and fiat credit for the purpose of creating liquid assets out of her capital goods and of facilitating subscriptions to the war loans.[10]

In mobilizing her credit resources Germany created four kinds of fiat money or credit, Darlehnskassenscheine, Reichskassenscheine, loans at war credit banks, and loans at municipal or cooperative loan bureaus.

The theory of German war finance was that the Reichsbank resources were to be utilized by the Government and that special war-time institutions should be created for extending commercial credit. The loan bureaus were authorized to furnish credit upon non-liquid assets, such as would not be accepted by a commercial bank. Against the pledges so deposited the Darlehnskassen issued notes, which were receivable for all public dues. Prof. M. J. Bonn in his "German War Finance" draws a parallel between the Darlehnskassenscheine and the British currency notes, but emphasizes that the former were secured by large margins and were collectable by a levy against the entire property of the borrower.

Reichskassenscheine, treasury notes, which were issued in 1874 to meet an emergency, and the outstanding amount of which was increased in 1913 from 120 to 240 million marks, were now made lawful money and the Reichsbank was relieved of its obligation to redeem these and the Reichsbank notes in gold. The four private note-issuing banks of Germany were protected against the loss of their gold reserve by permitting them to redeem their notes with Reichsbank notes.

Fiat credit was created by means of the war credit banks, which were organized throughout the country by the cities and commercial associations, by which the obligations of the banks were guaranteed and the losses refunded. These institutions extended loans against subscriptions to the war bonds, against merchandise, or against promissory notes. The Reichsbank discounted the bills of the war credit banks.

[10] Bendix, Ludwig, Germany's Financial Mobilization. Quarterly Journal of Economics, pp. 725–744, August, 1915.

Finally the municipal loan bureaus and the cooperative credit banks furnished loans in the smaller communities against collateral such as would not have been acceptable at the loan bureaus.

Further to facilitate subscriptions to war loans, the government made arrangements with the banks of the country to allow 4½ per cent on deposits ear-marked for the loan, and arranged with the Reichsbank for the sale of war-loan treasury bills carrying a preferential rate of discount on the condition that the proceeds would be used to take up the war loan.

The loan-bank notes were not an important factor in the subscriptions to the war loan. Although the volume of Darlehnskassenscheine rose from mk. 1,317 million on December 3, 1914, to mk. 12,911 million on December 7, 1918, the percentage of the war loans paid for by means of Darlehnskassenscheine declined as follows:

Loan	Per cent paid in Darlehnskassenscheine
1st	27.7
2nd	8.6
3rd	6.5
4th	4.8
5th	2.8
6th	2.7
7th	1.3

Apparently only a small amount of the loan bank notes were used in payment of war loan subscriptions.[11]

iii. *The Issue of Loans*

(a) *The Restriction of Capital Issues*—

In order to insure the most favorable condition for the issuing of national war loans, Germany restricted the issue of securities for purposes not essential to the war. By an order of the Bundesrat, a special license was required for the formation of joint-stock companies or for an increase in their capital involving more than mk. 300,000.[12]

[11] Holden, Sir Edward, Annual Report at the meeting of the stockholders of the London City and Midland Bank, January 29, 1918, reprinted in the Statist, February 2, 1918.
[12] Berliner Aktionar, November 7, 1917.

This legislation resulted in the marked decline in the number of new companies floated and in their capitalization. The number of new companies formed in 1915 was less than half that of 1914 and the capitalization was less than one-fifth.

CAPITAL ISSUES [18]

Year	Number of new companies	Capitalization (million marks)
1913	175	216.81
1914	119	322.22
1915	58	57.97
1916	89	113.16
1917 (½ yr.)	26	47.13

After the war, the deferred issues were floated in great quantities. As a result of inflation, the amounts rose enormously. In 1920 the capital issues totaled mk. 11,514 million, or 100 times the 1916 amount.

(b) *Terms of Loans*—

The distinctive characteristics of the German loans were, the limited number of types of loans, the relatively constant issue price, the regularity of the interval between the issues, and the simultaneous offering of bonds and treasury bills during each of the loan subscription periods. The loans uniformly were redeemable at the option of the government after 1924 and the treasury bonds had definite maturity dates. The terms of the later issues permitted the government to redeem the entire issue of treasury certificates at a premium and the holder had the option of accepting cash or a certificate bearing a lower rate of interest, but redeemable at a higher premium.

To facilitate subscriptions the government issued special treasury bills in anticipation of loans. They matured on the day that installments fell due. Bank deposits earmarked for the loan bore a preferred rate of interest. The loans were issued in September and March from 1914 through 1918. Thereafter the government had to rely on short-term financing and the use of paper money until the tenth war loan was floated in the fall of 1919. The

[18] For capital issues and listings on the stock exchange, see: Die Bank, and the Vierteljahreshefte zur Statistik des Deutschen Reichs.

proceeds of the war loans were used to retire short-term obligations outstanding.

The schedule of loans floated during the war is given herewith:

GERMAN WAR LOANS

No.	Date	Type	Interest rate	Price	Maturity	Redeemable after—	Amount in million marks	Number subscribers
1	Sept., 1914	Imperial loan... Treasury bonds..	5 5	97.5 97.5	 1918–20	1924	3,881 1,000	1,177,235
2	Mar., 1915	Imperial loan... Treasury bonds..	5 5	98.5 98.5	 1921–22	1924	8,331 775	2,694,063
3	Sept., 1915	Imperial loan...	5	99.0		1924	12,160	3,966,418
4	Mar., 1916	Imperial loan... Treasury bonds..	5 4.5	98.5 95.0	 1923–32	1924	9,196 1,572	5,279,645
5	Sept., 1916	Imperial loan... Treasury bonds..	5 4.5	98.0 95.0	 1923–32	1924	8,826 1,873	3,810,696
6	Mar., 1917	Imperial loan... Treasury bonds..	5 4.5	98.0 98.0	 1918–67	1924	13,122	7,063,347
7	Sept., 1917	Imperial loan... Treasury bonds..	5 4.5	98.0 98.0	 1917–67	1924	12,626	5,213,373
8	Mar., 1918	Imperial loan... Treasury bonds..	5 4.5	98.0 98.0	 1919–67	1924	14,766	6,510,278
9	Sept., 1918	Imperial loan... Treasury bonds..	5 4.5	98.0 98.0	 1919–67	1924	10,434	2,717,657
	Total....	....	....	....	....	......	98,563	

From the sixth to the ninth issue, treasury certificates were redeemable by drawing in series in January and July at 110. Treasury certificates not drawn for payment by lot are neither redeemable nor convertible into other issues until 1927 when the government has the option to redeem the outstanding amount at par. If the government exercises this option, the holder may obtain cash or 4 per cent treasury certificates redeemable at 115. Ten years later the government reserves the right to call the then outstanding 4 per cent treasury certificates, in which case the holder may obtain cash or 3½ per cent treasury certificates redeemable by drawings at 120. Thereafter the government has no further right to redeem or offer conversion privileges. The certificates mature July 1, 1967, on which date certificates outstanding shall be paid at 110, 115, or 120 according as the certificates bear 4½, 4, or 3½ per cent interest.

(c) *The Lottery Loan*—

Subsequent to the cessation of hostilities German credit was so badly shaken that it was impossible to float a long-term loan. The financing after the armistice was in the form of short-term bills and increases in paper circulation. In order to reduce the paper circulation Erzberger, the Minister of Finance, undertook to issue a lottery loan in November, 1919. The amount offered was mk. 5,000 million payable one-half in cash and one-half in 5 per cent war loans. No annual interest was payable, but instead a bonus of 5 per cent per annum which is payable when the certificate is drawn for payment. Drawings will be held twice yearly for eighty years. The prizes will be 2,500 in number and mk. 25 million in amount, and will vary from mk. 1,000 to mk. 1,000,000. At the end of twenty years, subscribers may demand payment, at the face value plus accrued interest.

The lottery loan was not a success. The ninth war loan brought in subscriptions of over mk. 10,000 million, whereas the lottery loan procured only mk. 3,818 million. The loan did not appeal to the investing public because of the other speculative opportunities at hand. Over 79 per cent of the total number of subscriptions was obtained from investors in one or two shares. The loan did not accomplish the object of reducing the floating debt, which increased from mk. 80,200 million to mk. 83,100 million during the very period of subscription. The recognition of the poor condition of the national credit led to the proposal to float a lottery loan and its failure demonstrated the collapse of German credit at home.

C. War-Time Taxation

i. *Taxation Policy*

Before the war, a special levy was imposed for military purposes, the *Wehrbeitrag,* a non-recurrent tax on property and income in 1913. But the carefully prepared plans of financial mobilization did not include provisions for war taxes. In fact, an expected short and victorious war, the expenses of which were to be paid by an indemnity, should not require any extensive taxation. The Empire and the federal states raised loans and increased their debts, but in the early period of the war did not cover the growing interest

charges. The prolongation of the war made the delay in levying taxes embarrassing. Whereas in 1913 the total taxes constituted 81.8 per cent of total expenditures, the ratio in the calendar year 1914 was 27.8 per cent, and in 1915 the ratio was 6.9 per cent. In 1916 the deficit in the ordinary budget, excluding military expenses, was about 480 million marks. The 1917 budget showed a deficit of 1,250 million marks, and the 1918 budget a deficit of 2878 million marks.[14]

The government subsequently enunciated the policy that, whereas, the expenses of the war would be financed through the issue of bonds and treasury notes, the ordinary or current expenses, including the interest on the war debt, would be met by taxation, At first the tax measures adopted were makeshifts and were to last during the war only. However, as the budget needs grew the government was compelled to undertake a thorough-going program of financial legislation.

ii. *Principles of Taxation*

The freedom of the Imperial Government in formulating a tax policy was restricted by political considerations, the reservation of income taxes to the federal states.[15] The failure of the Empire to levy direct taxes or taxes on personal incomes during the early part of the war, and its reliance on indirect taxes were severely criticized by the liberal papers, who lauded the British tax scheme for its justice to the working classes. The opposition in Germany to an Imperial income tax was due to the junkers' fear of its liberal use by the popularly elected Imperial Reichstag and their confidence in the undemocratically constituted diets of the federal states.

iii. *Taxes Enacted*[16]

(a) *War Increment Tax*—

The Imperial war tax of June 21, 1916, was a tax on property increments during the years 1915 and 1916.

[14] Program of New Imperial Taxation. British Board of Trade Journal, May 9, 1918, p. 584. Count von Rodern's budget speech, April 17, 1918.

[15] Zimmerman, F. W. R., Die Finanzwirtschaft des Deutschen Reichs. Berlin: 1916.

[16] Ballod, Karl. Die Reichssteuervorlagen von März, 1916. Schmollers Jahrbuch, 1916, xl, pp. 977–990.

The taxes applied to persons whose property had not varied even by 10 per cent during this period. The tax was in effect a property tax rather than an increment tax. The Act of April 9, 1917, supplemented the extraordinary non-recurring war levy and increased its yield by 20 per cent. On July 6, 1918, a levy on excess income and on property was imposed to cover the increase between the valuations in 1914 and 1918. Increases of income of less than mk. 3,000 were exempt. For the first mk. 10,000 of increased income the tax was 5 per cent, for the next mk. 10,000 10 per cent, for the next mk. 30,000 20 per cent, for the next mk. 50,000 30 per cent, for the next mk. 100,000 40 per cent, and for additional amounts, that is, above mk. 200,000, it was 50 per cent.

The property tax was also graduated. Properties under mk. 100,000 were tax exempt. The rate was graduated from 1 per 1,000 on the first mk. 200,000 up to 5 per 1,000 on properties exceeding mk. 2 million.

(b) *Company Profits Tax*—

The Act of June 16, 1916, required taxable corporations to form a war reserve of 60 per cent of the excess profits earned.

(c) *Other Federal Taxes*—

A series of acts passed in June, 1916, provided for increases in postal and telegraph rates, in taxes on tobacco and tobacco products, on railway rates and bills of lading, and for a tax on sales of over mk. 3000 at the rate of one per mill. As the need for revenue increased the Reichstag passed further tax measures with record speed in March and April, 1917. The sum of mk. 100 million of the profits of the Reichsbank was made payable to the government.

Furthermore, the stamp tax, imposed for a limited period, was extended until the year 1920. Freight and passenger rates were further raised by 10 to 16 per cent on all commodities except coal. The coal-production tax, a very lucrative source of revenue, subjected all coal, domestic or imported, to a tax of 20 per cent ad valorem, except that coal used in homes was taxed only 10 per cent.

(d) *Non-Federal Taxes*—

From the beginning of the war, the States and municipalities had to bear a share of the war burden. As a result, the states increased their income-tax rates. Few new taxes were laid. By statute, the increase of taxation by the federal states applied automatically to many municipal taxes and therefore the municipalities did not have to exercise independent powers of taxation to any great extent.

D. The Budget [17]

i. *Total Requirements*

For 1918, the budget requirements were mk. 7300 million, and for 1919, mk. 17,500 million.[18]

The expenditures for 1919 were as follows:

Items	Billion marks
Service of the debt	10.0
Pensions	4.3
Administration	1.7
Other expenses	1.5
Total	17.5

The estimated deficit was mk. 10 million. In addition to the federal budget, the several states had expenditures of mk. 6 million.

The 1920 budget called for revenues and expenditures three times as great as in 1919. The expenditures of the Empire were mk. 55,600 million and the revenue mk. 29,000 million. The expenditures included ordinary expenditures of mk. 28,000 million and extraordinary expenditures of mk. 11,600 million. In addition the deficit in the postal and railway service was over mk. 16,000 million.

[17] Statistisches Jahrbuch, sec. xv, Finanzwesen, gives a five-year record of the budget. The Reichshaushalts-etat gives the details of the budget.

[18] Budget address of Dr. Schiffer, Minister of Finance. Weimar, April 9, 1919.

Estimate submitted by Finance Minister Erzberger, Commerce Reports, November 12, 1919.

BUDGET FOR 1920

Items	Billion marks
Expenses:	
Commonwealth debts	12.4
Pensions, allowances to disabled and to widows	3.9
Medical treatment of wounded soldiers	1.1
Other expenses on soldiers	3.0
Food subsidy	3.0
Military and Navy budget	1.9
For miscellaneous purposes	2.7
Total	28.0
Extraordinary Budget:	
Payments under the Peace Treaty	5.0
Demobilization of the army and navy	2.1
Expenses of prisoners of war	1.0
Riot damage	1.0
Sundry	2.5
Deficits of postal service and railways	16.0
Total	27.6
Grand total budget	55.6
Estimated Revenues of the Regular Budget:	
Revenues from administration	0.2
Direct taxation and taxes on traffic	10.8
Duties and consumption tax	9.1
Other direct taxes	3.0
Revenues from banks and from export duties	2.0
Revenues anticipated from new taxes	2.9
Total	29.0

The budget was subsequently revised to yield mk. 39,890 million. The revenue was derived chiefly from the income tax, the coal tax, the sales tax, and customs revenue.

The final figures for the year 1920 indicated a revenue of mk. 27,720 million, expenditures of mk. 102,576 million, and a deficit of mk. 74,855 million, met by an increase in the floating debt.

ii. *Deficits.*

The deficit of the 1919 budget increased as the year advanced and exceeded the estimates. The 1920 deficit amounted to mk.

26,600 million in the early budget proposals. On September 23, 1920, Herr Wirth estimated the 1920 deficit at mk. 55,700 million, and at the end of the year the deficit seemed to be mk. 74,855 million.

ORDINARY BUDGET REVENUE FOR 1920, REVISED

Items	Million marks	
Direct Taxes:		
Income tax	12,000	
Corporation tax	900	
Tax on interest and dividends	1,300	
Property tax	100	
Inheritance tax	620	
Total direct taxes		14,920
Indirect Taxes and Monopolies:		
Sales tax	3,650	
Coal tax	4,000	
Customs revenue	2,500	
Land tax	220	
Stamp tax	400	
Railway tax	630	
Tobacco tax	1,000	
Beer tax	130	
Wine tax	250	
Champagne tax	100	
Brandy tax	320	
Mineral waters tax	500	
Matches tax	500	
Cards tax	120	
Profits of loan bureaus	1,850	
Profits of the Reichsbank	350	
Miscellaneous revenue	2,420	
Total indirect taxes		17,970
Emergency levy	2,500	
Property increment tax	4,500	
Total special taxes		7,000
Grand total		39,890

The extraordinary budget consisted of the expenditures incidental to the execution of the terms of the Treaty of Peace and were larger than estimated. The actual expenditures for the year 1919 and up to July 26, 1920, and estimated expenditures for the

two-thirds of the year ending March, 1921, totaled mk. 53,685 million, apportioned as follows:

	Million marks
Army of occupation, reparation commission, etc.	14,900
Disarmament	5,200
Restitution	565
Payment and deliveries under the treaty	25,540
Damages owing to liquidation of property and compensation	7,480
Total	53,685

The origin of the deficit is the same as in the other countries of Europe. The issue of paper money raised all prices, including the cost of administering the government. The continuous issue of paper money increased prices and widened the gap between revenue and expenditure. Then to bridge it, the government issued more paper money.

To keep the price of necessities down, the Imperial government granted a food subsidy of mk. 3000 million for the year. Furthermore, in spite of an increase of 400 per cent in postal rates, the postoffice department showed a deficit of mk. 2000 million. The railroad deficit amounted to over mk. 16,000 million. Before the war the income from railroads made it possible to reduce the national debt. In 1913 the surplus of the railroads was about mk. 325 million, but it decreased during the war and in 1917 amounted to only mk. 18 million. In 1918 a deficit of mk. 1325 million appeared. The Prussian railroads before the war were appraised at about mk. 7,000 million.

In criticism of the amount of the budget deficit, mk. 76,000 million, the French experts on the Reparations Commission pointed out that whereas the budget estimate of expenses necessary to execute the Peace Treaty was mk. 42,000 million, the amount actually expended was only mk. 17,000 million. The railroad deficit was due in part to the fact that the personnel was increased by over 350,000 employees since the pre-war days, and the employees in the postal service were several times as numerous as in 1919. The expenses of the several ministries increased greatly over the 1919 figure. For instance, budget estimates for the Ministry of the Interior in 1920 were mk. 1,433 million as against mk.

19 million in 1919. The figures for the Ministry of Foreign Affairs were mk. 295 million in 1920 and mk. 24 million in 1919.

iii. *Budget Comparisons*

The pre-war budget of Germany amounted to about mk. 3500 million, the 1920 budget amounted to mk. 55,500 million, or over fifteen times as much. The service of the debt in 1913 amounted to mk. 238 million, and in 1920 to mk. 12,400 million, an increase of 52-fold. The debt service in 1913 constituted 6.4 per cent of the total budget and in 1920 it was 22.4 per cent. The interest on the debt in 1920 was 3.4 times the total expenditures of the 1913 budget.

PRE-WAR BUDGET, FISCAL YEAR ENDING MARCH 31, 1914

Items	Million marks
Expenditures for:	
Imperial debt	237.8
Army	775.9
Navy	197.4
Post and telegraph	699.3
Railways	108.7
Pension fund	142.5
Treasury	114.3
Miscellaneous	1301.5
Extraordinary	118.6
Total	3696.0
Revenue from:	
Treasury	2489.0
Post and telegraph	842.4
Railways	153.8
Miscellaneous	92.2
Extraordinary	118.6
Total	3696.0

The pre-war income of Germany was about mk. 45,000 million, a sum less than the present annual budget. Indeed, inflation destroyed the significance of this comparison. It changed the monetary unit in which the comparison is expressed. Inflation lightened the burden of the war and deflation will increase it, if the debt is paid.

That the raising of the German national revenue already bears heavily upon the individual taxpayer is evident from an estimate prepared by Mr. Dumont, Chairman of the French Budget Committee, who calculated the per capita tax of the several belligerents, which is given in dollars at parity as follows: In Germany $175, in England $105, in France $91, in America $50, in Italy $45.[19]

The figures submitted by Austen Chamberlain in the House of Commons likewise indicates the burden on the German taxpayer. However, since the conversion into sterling is at mint parity, allowance must be made for the varying degrees of inflation of the currency.

DIRECT TAXES PER CAPITA

Country	1913 s.	1913 d.	1920 s.	1920 d.	Ratio of 1920 to 1913 taxes. Per cent
Italy	12	6	43	3	346
France	13	6	47	0	348
England	31	0	303	0	977
Germany	32	10	452	7	1379

A more accurate measure of the burden of taxation is the percentage of income paid in taxes. In England, the lower classes pay in both direct and indirect taxes between 7 and 8 per cent of annual earnings, whereas in Germany, the same class would pay about 16 per cent. The relative rates of taxation in the higher income classes is likewise greater in Germany.

RELATIVE INCOME TAX RATES[20]

(conversions at parity)

Amount of income. Marks	Paid in Germany		Paid in England	
	On earned income. Per cent	On unearned income. Per cent	On earned income. Per cent	On unearned income. Per cent
50,000	26.1	32.5	7.5	9.0
100,000	33.6	39.1	15.7	18.7
300,000	45.7	50.2	23.2	23.9

[19] Frankfurter Zeitung, May 14, 1920.
[20] Frankfurter Zeitung, September 22, 1920.

E. An Appraisal of German War Finance

Before the war the debt of the states and provinces grew as a result of social legislation. The debt of the Empire alone, excluding that of its political subdivision, was about one-sixth that of France, about one-third that of Great Britain, and slightly less than the national debt of the United States.

i. *The Debt*

The German fiscal policy during the war was based on a wrong theory,—that the indemnity levied upon the enemy would refund the war debt. But unethical as the aim was, German war finance was well organized. The loans were issued at definite intervals. The rate of interest was constant and the yield fairly so. The securities were of a uniform type; there was no need for diversification of types of war loans as in France particularly and even in Great Britain, in order to attract subscriptions. The loans were redeemable in about 10 years. This feature showed financial foresight. Until the collapse of Germany, the floating debt constituted a small percentage of the total debt, in striking distinction to that of France and even of Great Britain. At the end of 1918, when the total debt was mk. 139,000 million, the floating debt was mk. 40,000 million. The failure of German credit after the armistice raised the floating debt to mk. 92,000 million out of a total debt of mk. 197,000 million. With the exception of a small loan in the United States, soon repaid, and loans in the neighboring neutral countries, the foreign debt of Germany was practically nil. The German students of finance pointed out that internal loans had an advantage over external loans in that the proceeds were spent at home, that there was no burden through the payment of interest to foreigners, and the entire national production and savings were devoted to the war.[21]

However the Germans made a virtue of a necessity. External credits have no value if foreign supplies cannot be imported from the lending country. The blockade made external loans useless to Germany.

Strong inducements practically compelled subscriptions. For instance a portion of the salaries of all public officials was retained

[21] Bonn, M. J., German War Finance, Chaps. II, III.

for the purchase of war scrip. Soldiers were offered ten days' leave for every mk. 500 they subscribed. Treasury bills, the proceeds of which were to be devoted to the loan, bore a preferential rate of discount, as did also bank deposits ear-marked for the loan. Savings banks waived the usual notice of withdrawal in favor of subscribers to war loans. Loan banks offered loans at low rates of interest, to borrowers subscribing to war bonds. Municipalities offered to investors in their securities an exchange of holdings for national war bonds.[22] Attractive features were added to the later loans. The sixth loan was made redeemable at a premium by lot. Bonds drawn would be paid at 110, and undrawn bonds converted into bonds bearing lower interest would be redeemable at further drawings at 115 or 120.

War loans were raised by dangerous financial methods. Official instructions to subscribers to the third war loan reveal the pyramiding of German credit. "If you have already subscribed to the first and second war loans and paid in full for the same you can participate in the present issue. All you need to do is to take your stock or the receipt for the amount paid, to a bank which will advance you 75 per cent of the nominal value, so that, if you have mk. 400 of old war loan you can subscribe mk. 300 in the new issue without paying a single pfennig. You can even subscribe four times this amount, or mk. 1,200, if you also leave with the bank the stock that you take in the new loan in which case you will have given the bank as security 400 mk. of the old war loan and mk. 1200 of the new war loan, together mk. 1,600, against a loan of mk. 1,200."[23] Similar methods were adopted for attracting subscriptions from neighboring neutral countries. In Denmark, for example, German bonds of mk. 1,000 were offered in exchange for Danish gold, and by depositing these bonds at the bank and paying mk. 500 additional, the purchaser received a second bond valued at mk. 1,000. By depositing the second bond and paying another mk. 500 he received a third bond for mk. 1,000. He thus became the holder of three German bonds of an aggregate principal value of mk. 3,000 which cost him mk. 2,000.[24]

The evils of the excessive reliance upon loans to finance the

[22] Jennings, H. J., Germany's Financial Outlook. Nineteenth Century, February, 1918, 375-6.

[23] Koelnische Zeitung, September 2, 1915, quoted in New York Nation, March 8, 1917.

[24] Nineteenth Century, *id.*, p. 378.

war manifested themselves in increasing debt charges, and in the rising cost of administering the government and in the rise of the cost of living. When the budget was no longer adequate to pay the service of the debt, vigorous taxes became necessary, and to apply them suddenly was a difficult matter.

The German loan policy broke down as a result of the prolongation of the war. It was carefully conceived to meet the needs of a short war. But it produced all the results of inflation and was condemned finally by German officials and by students of finance. In the words of Dr. Bernhard Dernburg "The financing of the war has really not been effective. . . . We are able to balance the budget by leaving the whole of our military expenditures out of the ordinary estimates and by entering it as an extraordinary war expenditure. We have a new debt to the amount of mk. 100,000 million and for the service of this debt we need about mk. 7,000 million. But in this direction practically nothing has been done."

ii. *Taxation*

The original theory advanced by the Ministry of Finance was that war taxation would not be levied. However, the need for balancing the budget compelled a change of policy. Taxation was to be levied, but only to meet the interest charges on the war debt. There was delay not only in passing tax legislation but also in putting it into effect, notably in the case of the war profits tax. The limitations of the old German constitution made an elastic system of imperial taxation impossible. Toward the end of the war a vigorous taxation policy was introduced, but it was too late to avert the effects of the earlier loan policy. During the five years 1914 to 1919 even the interest charges on the debt were not completely covered by revenue. In other words, the interest on the mounting debt was paid in part from loans.

F. Taxation After the Armistice [25]

The characteristic of the post-armistice tax policy has been the emphasis on direct taxation. As a result of the republican constitution the tax policy of Germany was changed and the Empire was

[25] Berliner Tageblatt of April 28, 1920, gives the official text of these laws.

endowed with the right to levy direct taxes. The relevant articles of the constitution are given herewith:

Article 8. The government further possesses legislative power over taxes and other sources of income, insofar as they may be claimed in whole or in part for its purposes. In the event that the government claims taxes or other forms of income which formerly belonged to its confederated states, it will be bound to consider the maintenance of such states' vital means of support.

* * * *

Article 15. The government administration exercises supervision in matters over which the nation has the right of legislation.

Insofar as the laws of the government are to be exercised by state officials, the government administration may issue general directions. It has the power to send commissioners to the central authorities of the state, and with their approval to subordinate officials to supervise the fulfilment of the government laws.

* * * * * * * *

Article 84. The government shall provide by law for:

1. The organization of the administration of taxes in the different states so far as shall be required for the unified and regular fulfilment of the national tax laws. . . . 3. Adjustment accounts with the confederated states (are provided for).

The unification of state and imperial taxation was effected by the *Reichsabgabeordnung* or national levy ordinance. It stipulates the proportion of the proceeds of the various imperial taxes which the federal states and the communities are to receive. In future only the Republic will collect taxes on income, on property and on inheritances. The former income tax of the federal states had a fixed rate but the new imperial income tax has a graduated rate.[26] The federal states will receive a share of the income tax on the principle that revenue from the low rates would have been paid mostly to them and revenue from the supertaxes to the Republic. They will receive 90 per cent of the taxes on incomes under mk. 15,000, and so on in decreasing ratios until 20 per cent of the taxes on incomes over mk. 400,000.

The new law provides that each state or municipality shall receive from the revenues of the national income tax an amount equal to the average annual revenues from the local income taxes during the previous three years. The administration of the tax system was centralized and put in charge of officials of the Empire. The Minister of Finance will administer all taxes. Coöperation of state and local tax officials is provided for. Furthermore, the

[26] Berlin correspondence, London Economist, Dec. 6, 1919.

Empire will assume the burden of certain expenditures which though local in form are national in character.

i. *Indirect Taxes*

The sales-tax rate was raised in 1919. Practically everything, except the most essential goods, was taxed from 1 per cent up to 15 per cent, depending on its character. Of 19 groups of luxuries 11 were subject to a 15 per cent tax. Sales for export were exempted from the tax. Two methods of collection were followed, in some cases a tax on the sales price of the article and in some cases a tax on the total turnover of a retail merchant.

In February, 1920, for the first time since August, 1914, the Ministry of Finance published an official summary of the national revenue. The Deutsche Allgemeine Zeitung of July 9, 1920, comments that "the possibilities of following up the development of economic conditions in Germany and of forming a correct judgment were hampered by the lack of sufficient and accurate data. One had to rely on figures that, now and then, slipped into the public press." The total revenues for eight months ending January 31, 1920, amounted to mk. 6,025 million. The estimated amounted for the year ending March 31, 1920, was mk. 13,542 million. The sources of revenue were as follows:

	Per cent
Extra war tax............	16.8
Coal tax.................	16.6
Duties...................	10.8
Turnover tax.............	9.8
Tobacco tax..............	9.8
Stamp dues (on legal papers)	9.6
Railroad revenues........	7.7
Wine tax.................	5.2
Numerous other taxes.....	13.7
Total............	100.0

The heavy taxes on income and property were passed in the spring of 1920 and do not show in the above list.

The receipts for the fiscal year 1919 were obtained from a great variety of sources, from customs duties, from taxes on tobacco and cigarettes, on sugar, on salt, on the manufacture, import and consumption of alcohol and its products, on the consumption of vinegar,

wine, champagne, mineral water, and beer, on illuminants, on matches; from stamp taxes on playing cards, on invoices and bills; stamp taxes on contracts, securities, dividend warrants, lottery tickets, private or governmental, bills of lading, directors' fees, sales of merchandise, transfers of real estate, insurance; from taxes on coal, on the purchase of real estate, on sales, on postal and telegraph service; from the property tax, inheritance tax, war surtax to 1916, extra war tax of 1918, war tax of 1919, commonwealth emergency sacrifice tax (*Reichsnotopfer*), and tax on increase of property.

ii. *Direct Taxes on Income and Profits*

(a) *Taxes on Income*—

The income tax became effective April 14, 1920, and applies to the income of individuals. The tax is payable to the Empire only. All Germans are subject to this as well as foreigners deriving an income from property or business in Germany and aliens domiciled in Germany longer than six months. Taxes are levied on income from business capital, labor, and any other receipts including non-recurrent profits. Exemptions of mk. 1,500 are granted to each tax-payer and mk. 500 for each dependent person in his household. Inheritances, insurance payments, business expenses, interest on debt, charitable contributions and business losses are deductible. From 10 per cent on the first mk. 1,000 of taxable income, the rate rises by increases of 1 per cent on each mk. 1,000 up to mk. 25,000 and ultimately by graduations of 1 per cent on each additional mk. 50,000. The actual rate on the entire income is as follows for a few selected classes of income:

Income	Tax on unmarried		Tax on married with 5 children	
Marks	Marks	Rate per cent	Marks	Rate per cent
2,000	50	2.5	0	
4,000	270	6.7	0	
6,000	530	8.8	50	0.8
10,000	1,170	11.7	675	6.7
50,000	13,060	26.1	10,980	22.0
100,000	33,625	33.6	32,275	32.3
500,000	252,115	50.4	250,345	50.1
1,000,000	552,100	55.2	550,300	55.0

The effect of inflation was to increase many incomes 10 to 15 fold and thus to raise the rate of taxation. A man with a pre-war income of mk. 2,000 had to pay mk. 50 or 2.5 per cent, but out of his post-war income of 20,000 marks he had to pay mk. 2,000 or 10 per cent.

(b) *Tax on Income from Investments—*

This tax applies to income from accumulated capital, or, as the British term it, unearned income. The law went into effect on March 31, 1920. The tax applies to the income from invested capital such as dividends, interest, royalties, profits from every kind of participation in business, claims and mortgages. Germans, non-Germans domiciled in Germany, and domestic corporations are required to pay this tax on the income from their foreign investments. The exemptions from this tax include the income of savings banks, coöperative societies, insurance companies, universities, and religious and charitable institutions. This tax does not apply to the premium war loan and other loans enjoying tax-exemption. The tax rate is 10 per cent and is paid at the source, i. e., the debtor pays the tax within one month from the amount due to a creditor liable to the tax. To prevent evasion, a law was passed permitting banks to accept dividend warrants only if the entire bond or certificate is deposited with them.

(c) *Tax on War-time Increase of Income—*

This tax, also known as the extraordinary war tax, went into effect on September 10, 1919, and applies to the excess of income in the fifth year of the war over the pre-war income. Individuals and corporations are liable to this tax. The amount taxable is the difference between the income for 1919 and the income for 1914, which as a minimum must have been mk. 10,000 or over. Corporations are taxed on the difference between the profits of the two years. War incomes of less than mk. 30,000 or income increases of less than mk. 3000 are exempt, as are also increases of corporation profits of less than mk. 5000. The rates of taxation applicable to individuals range from 5 per cent on the first mk. 10,000 of increase up to 70 per cent on increases of over mk. 200,000. Increases of corporate profits are subject to an 80 per cent tax. The law recognizes the severity of this tax and makes adequate provisions for the modification of the assessments, for the

limitation of this tax in case 90 per cent of the total increase in income is taken by a group of specified taxes, including this. If necessary the tax-payer will receive credit on a 5 per cent basis to pay this tax. According to a previous law effective July 26, 1918, corporations had to pay a tax on the increases of profit made in 1918 at the rate of 60 per cent of the increase.[27]

(d) *Tax on Corporate Profits*—

This tax, applicable to the income of corporations, corresponds to the income tax on individuals. The tax, effective April 15, 1920, is levied on the entire profits, and consists of a normal tax at the rate of 10 per cent of the income and a surtax which varies from 2 per cent on the amount of the dividends when 4 per cent dividends are paid up to 10 per cent when dividends of over 18 per cent are paid. Corporations exempted include political bodies, states and municipalities, universities, charitable and other like institutions, and pension banks.

iii. *Property Taxes*

In addition to the several taxes on income, on war-time increases of income, and on corporate profits, a series of property taxes was levied. The law of July 26, 1918, taxed property on the valuation of December 31, 1916, exempting the first mk. 100,000. The rate varied from 1 per mille on the first mk. 200,000 of taxable property up to 5 per mille on property in excess of mk. 2 million. The war-wealth levy and the capital levy are treated elsewhere.

(a) *Recurrent Levy on Increases of Wealth*—

In addition to the non-recurrent levy on the increases of wealth during the war, the Reichstag passed a bill (April 21, 1920) providing for recurrent taxation on the increases of wealth at intervals of three years. Increases of less than mk. 5000 and properties of less than mk. 20,000 were exempted. The rates vary from 1 per cent on the first mk. 10,000 of the taxable increment to 10 per cent on the taxable increment above mk. 300,000.

Under the tax an increase of mk. 6000 will pay mk. 10; an

[27] Koelnische Zeitung, September 29, 1918.

increase of mk. 10,000 will pay mk. 50; of mk. 100,000, mk. 2800; and of mk. 1 million, mk. 82,000.[28]

This law replaced Herr Erzberger's proposed, but abandoned tax on expenditures under which the government would tax not income or production but consumption, or all personal expenditures above a given figure.

(b) *Inheritance Tax*—

This tax in effect September 1, 1919, taxes legacies and donations to natural persons. Germans and foreigners living in Germany are subject to the tax. The law exempts household goods up to mk. 50,000 and also mk. 20,000 of an estate of less than mk. 200,000. Furthermore, legacies of less than mk. 500 are exempt and in cases of bodily injury of the legatee or other good cause the whole legacy is exempt. Deductions are allowed of the debts of the testator as well as unpaid taxes. The rate of taxation varies according to the amount of the legacy and the grade of relationship between the testator and the legatee, which is classified. Six degrees are recognized. On the first taxable mk. 20,000 willed, the tax varies from 4 per cent to 15 per cent depending on the degree of relationship. Above mk. 150,000 of inheritance the tax varies from 8 per cent to 30 per cent.

iv. *The Effect of Heavy Taxation*

Taxes in Germany, as shown above, are heavier than in any of the major belligerent countries. What a burden it is upon the individual may be seen from typical cases. After the war a taxpayer retaining his pre-war capital of mk. 1,000,000 and an annual income of mk. 50,000 must pay mk. 244,250 under the emergency levy. His income is thus reduced to mk. 37,787 of which he has to pay an income tax of mk. 8931 and a tax on investments of mk. 3778, leaving a net income of mk. 25,078. This is subject to a long list of indirect taxes which have been given above.

A taxpayer whose pre-war capital was mk. 2.5 million and who doubled it during the war must pay mk. 2,328,030 war-wealth levy and mk. 1,004,500 under the emergency levy. Of the remaining income, he must pay income tax of mk. 26,439 and a

[28] Berlin Correspondence of the London Economist, March 9, 1920.

tax on income from investments of mk. 8337. His net income after paying direct taxes is mk. 48,599 as compared with a pre-war income of mk. 125,000 or an income before the direct war taxes were enacted of mk. 250,000. Indirect taxes would diminish the net income further.

(a) *The Flight of Capital*—

Prior to the military collapse of Germany and also after the signing of the armistice, rumors were afloat that the government would resort to repudiation. These rumors upset the market for war bonds. As a result the government issued a proclamation that it did not intend to confiscate bank deposits, or money or securities of any description, that it did not intend to invalidate any of the war loans and that it would not interfere with pensions and other legal claims of soldiers, widows or orphans. It did unequivocally affirm its intention of levying heavy taxation on incomes and property.

As a result of the heavy taxes, proposed and enacted, German capital fled to the neighboring neutral countries. Bonds owned in Germany were sold at a sacrifice. Even German currency was converted into foreign currency. It was estimated that by the middle of 1919 about 4 or 5 billion marks had been sent to Holland. The Frankfurter Zeitung estimated that about mk. 35 billion of German capital had "escaped" into Switzerland from the date of the armistice to the middle of 1919. German capitalists bought banknotes of foreign countries extensively, apparently for the purpose of evading taxation. The purchases of large denominations of dollar and sterling notes, not usual as a trade practice, continued throughout the early part of 1919. Even ruble notes were bought at rates higher than prevailed in other countries.

(b) *The Effects of the Flight of Capital*—

The sale of marks and the purchase of foreign currencies caused a slump in German exchange rates. In turn the price level in Germany was depressed below the world's level and goods became very cheap. Foreign purchasers rushed to buy goods and drained Germany of her meager supply of commodities. German writers called this bargain sale "Deutschlands Ausverkauf." (This subject will be treated further under the section on foreign exchange.)

(c) *Counter Measures*—

To overcome the effects incidental to a program of heavy taxation, various measures were proposed and enacted, such as the official assurance that repudiation would not be resorted to, the proposal to restrict emigration, the control of the export of capital, the abortive proposal to issue new currency, and the control by banks of the payment of interest and dividends on securities.

1. THE RESTRICTION OF EMIGRATION.—Increasing taxes induce evasion. The comparatively moderate increase in taxation before the cessation of hostilities made it necessary to consider means to prevent evasion. A bill in the Reichstag provided that persons that had a permanent residence in Germany and desired to emigrate should be liable for the payment of taxes for a period of 5 years after the conclusion of peace, on the theory that those who enjoyed the protection of the German army should pay the costs. Those exempt from the tax included persons whose property did not exceed mk. 30,000, persons who emigrated in the interests of Germany, and persons involuntarily detained in Germany. Those liable to the tax must leave 20 per cent of the taxable property as security in the event of their emigration.[29]

2. THE CONTROL OF THE EXPORT OF CAPITAL.—The flight was to be checked. Investments of money abroad were prohibited by a decree of November 21, 1918, which was amplified by another dated January 15, 1919, to the effect that anyone who between July 1, 1918, and the date of the first decree had sent any securities abroad by any means other than a bank must notify the Property Tax Office. The banks in turn must similarly notify this office of the transfer of money or securities abroad to be held in trust by a foreigner or to be credited to him. The export of goods of great value or of works of art must be reported and the contents of registered letters declared.

To prevent the smuggling of banknotes out of the country the regulation of foreign bills was made more stringent. Only mk. 50 per day and mk. 150 per month were permitted to be sent abroad without a license. Prior to December 18, 1918, the limit was 1000 marks per day and mk. 3000 per month. An act of

[29] Koelnische Zeitung, April 19, 1918; also British Board of Trade Journal, May 23, 1918; Commerce Reports, June 15, 1918.

March 1, 1919, forbade, under penalty, traffic in German banknotes. Frontier guards were strengthened to make the law effective.[30]

3. The Issue of New Money.—The existing currency was to be demonetized. To prevent the evasion of taxes the Ministry of Finance proposed to withdraw all paper money and to replace it by bonds or emergency paper. The latter was to be exchanged for new money, when issued, and the old paper money would be declared invalid. To avoid trouble, holders were advised to deposit their money in banks. Preparation was also made for exchange over a counter. A list of holders and the amounts was then to be transmitted to the tax office.

These measures aroused great protest. The difficulties of the plan were many. The length of time for registration and stamping of the billions of currency outstanding would be very great. The proposed issuance of temporary currency until a new series could be prepared would be a temptation to wholesale forgery. The measure was therefore abandoned.[31]

4. Bank Control of Income from Investments.—The aid of banks was enlisted. The fear of the proposal to stamp money induced people to invest in securities. When the plan failed, the government attempted to trace the property and income of its citizens through the registration of securities. Regulations were issued whereby coupons and dividends could be collected only through banks and bankers. In case securities were kept abroad or in private vaults the bank might pay interest or dividends only upon statements under oath as to the place of deposit and the amount of the securities. The banks were to furnish this information to the Treasury. As a result of this measure securities were sold again and paper money again hoarded, or sent out of the country. So the game of "hide and seek" was played on a national scale. To prevent the flight of capital may require international coöperation for currency exports remain uncontrolled.[32]

[30] Deutsche Allgemeine Zeitung, March 15, 1919.

[31] Deutsche Allgemeine Zeitung, *ibid.*, March 15, 1919; Associated Press dispatch, Weimar, July 23, 1919; Journal of Commerce, September 17, 1919.

[32] Koelnische Zeitung, November 22, 1919; Algemeen Handelsblad, Amsterdam, November 2, 1919; Commerce Reports, November 29, 1919.

G. The Outlook

But heavy taxation will not assure the financial future of Germany. No perspective is true which omits from view the indemnity and the financial demands of the victorious powers. The manner of settlement of the indemnity determines the outlook in Germany.

i. *Further Inflation and Bankruptcy Proposed*

Advocates of cheap money, and those who would cure her economic ills by printing more paper money are not lacking in Germany. Frequent proposals were made to repudiate the war loans, or to issue non-interest bearing loans which would circulate as currency, as means of ridding the state of interest charges and of balancing the budget.[33]

In view of the increasing deficits in the budget, and the large indemnity that Germany is to meet, national bankruptcy is seriously being advocated as a solution. Some German bankers regard the step as inevitable in view of the loss of resources, the lack of raw material, the undernourishment of the population and the inability to obtain credit. This bankruptcy may take the form of a reduction or suspension of interest, temporarily or indefinitely, the repudiation of the principal, or even a confiscatory tax on interest from war loans. The spirit of the people is depressed and direct taxes cannot be increased. Indirect taxes would further lower the standard of living or else compel the government to subsidize the distribution of food, causing the deficit in the budget to increase.

Opposition to a declaration of bankruptcy is based on financial, social, and ethical considerations. Cessation of interest payments or cancellation of state debts are regarded as impossible proposals. The savings banks and insurance companies have billions invested in war loans. The commercial banks are holding billions of short-term indebtedness, almost 50 billion on March 31, 1920. Public announcement of insolvency would reduce the taxable income in Germany by an amount greater than the charges on the debt. Furthermore, the expedient would be "unjust, brutal and anti-

[33] A typical example is a pamphlet by a Dr. Alexis Schleimer, "Must We Pay Interest on War Loans?" See also Plutus, March 27, 1918.

quated" according to Dr. Walther Rathenau. It would penalize those citizens who helped to finance the war and would break the promises of the old as well as the new government of Germany. Finally, the war bonds were distributed widely among the masses who have a stake in the maintenance of the existing order. A declaration of national bankruptcy would cause the vanishing of their continually depreciating savings and might be the removal of the last prop of the social order. Because of its social results national bankruptcy is perilous.[34]

ii. *Increasing the National Revenue*

The more hopeful economists expect that Germany will solve her difficulties by increasing the national income and the tax revenues. The control of national expenditures in the attempt to balance the budget was entrusted to a National Finance Commissioner, a new functionary, with wide powers to curtail expenditures. The extent to which drastic direct taxes have been put into effect has been shown. Germany has probably exhausted both in extent and severity the possible sources of taxation. It is feared even that industry will be repressed, and exports checked by the existing drastic fiscal policy.

Another means of meeting the fiscal demands after the war is by increasing the national income. The attempt to diminish the consumption of the individual through a tax, not on income, but on expenditures, failed of enactment. But there is a widespread determination to eliminate industrial inefficiency and the wastes of the competitive system. As a result of the war, production per capita was increased through the abandonment in an industry of inefficient plants and the concentration of production in those that were well located with respect to sources of supply, labor, and markets. The standardization of product, the concentration of industries in a few strong hands, and elimination of competition, with government encouragement and control, are being

[34] Germany's Solvency for the Purpose of Reparation, a memorandum, prepared by Dr. Moritz Bonn and submitted by the German delegation at the Spa Conference in July, 1920. Reprinted in the New York Nation, October 6, 1920, pp. 384-390.

Warburg, Max M., Die notwendigen Vorbedingungen für die Gesundung der deutschen Währung, Hamburg: Ackerman and Wolf, 1920; pp. 26-28.

Weltwirtschaftszeitung, December 13, 1918.

introduced in the industries either through the formation of syndicates of private firms or through the partial nationalization of industries. Trading in commodities, particularly those produced abroad or entering into foreign trade, will be relatively unrestricted. It is the hope that the national income will be increased by these means, so that the burden of the new budgets may be diminished.[85]

iii. *Germany's Losses*

The terms of the treaty have cut down Germany's capacity to pay the indemnity. The loss of territory has reduced the area of agricultural production by 13.5 per cent. The inability to obtain fertilizers during the war, the decline in fodder imports and the consequent decline in live stock, resulted in a decline in the production of vegetable food of 40 per cent and in animal food of 60 per cent. Furthermore, Germany lost from 70 to 75 per cent of her iron-ore resources and will retain only 60 per cent of her capacity for producing iron and steel. The amount of steel exports available for the payment of reparation will be reduced further by the need to pay for imported ore and for meeting the minimum domestic requirements of industry. The loss of coal resources, allowing for the varying fuel value of different grades, will reduce the production to 57 per cent of the pre-war output. The seizure of German assets abroad, the rupture of foreign connections of German merchants and the loss of merchant shipping have eliminated a large source of invisible credits in the balance of trade. These losses have reduced industrial production to 50 per cent of its pre-war capacity. To these difficulties are added the chaotic financial condition, the lag between wages and rising prices, and the psychological depression.

There are slight offsets to these losses. Apparently Germany is politically stable. It has successfully weathered a revolution with notably little cost. Bolshevism will probably find no place among a population which is lowest in illiteracy in Europe. Although, in common with labor in other countries, German labor is weary and discontented, an adequate supply of food would probably restore the habits of industry and thrift that prevailed

[85] Prof. Franz Eulenburg, Germany's Financial Policy After the War. Welthandel, June 21, 1918.
Walther Rathenau, Die Neue Wirtschaft, a book devoted to the subject.
George Munch, in the Vossische Zeitung, January 20, 1918.

before the war. Widespread vocational training and technical skill, the fruits of the pre-war period, are still assets of the German workers, even though they may lack the raw material to which to apply them.

iv. *Prerequisites for Payment of Indemnity*

The reparation demands will call for 34 per cent of the current annual output of Germany's coal production, and 40 per cent of the building capacity of the German shipyards before the war. In addition to these annual charges, a lump sum of 132 billion gold marks was finally accepted by Germany as the indemnity. Assuming that an indemnity of only 50 billion gold marks, the definitely fixed minimum, is to be levied, the interest at 5 per cent and sinking-fund at 1 per cent will require 3 billion gold marks or 30 billion paper marks. Can Germany pay this sum? In order of precedence, reparation payments must come after the population has had food and employment, and after the deprivation of goods during the war has in part been made good. To provide these two needs, prior to reparation, Germany needs credit. For example, the raw material necessary in the textile trade requires credit of 4.5 billion gold marks. Before these additional credits can be obtained outstanding credits must be paid. In the 14 months from January, 1919, through February, 1920, the excess of imports over exports, plus the unpaid balance of imports from neutral countries during the war, totaled mk. 60 million, of which about 10 billion have been paid through the exportation of gold and securities.

Germany can pay only in goods—by an excess of exports over imports. For even if she mortgaged all the private and public property in Germany, she could pay interest to her creditors only in commodities. The charges of interest and amortization on 132 billion gold marks would absorb the entire pre-war national savings of Germany and would leave Germany without any surplus capital for the inevitable new developments that are the marks of a progressive civilization. Heavy taxation will remove the incentive to effort and production. Since Germany can pay the indemnity only by exports, the Allies must decide whether they wish to restore the prestige of Germany. They are by no means unanimous in this decision for at least one of them feels, that a prosperous

Germany means a powerful and vengeance-seeking enemy. If Germany is put in a position where she can have an excess of exports, she may be able to pay a part of the indemnity. Otherwise the hope of her liquidating the indemnity is largely futile. In order that she may be restored, her finances must be put upon a sound basis. The amount of her liabilities under the reparation clauses will determine the volume of the floating debt and will determine also whether her budget will balance. For, if only the 50 billion gold marks definitely fixed in the treaty were set as the total indemnity, the per capita debt would be about 1 thousand gold marks or about 10 thousand paper marks. The average head of a family of four would at 6 per cent have to pay annually 2400 paper marks for interest and sinking fund. According to the statistics of Prussia in 1918, 81 per cent of the taxpayers had an income of less than 3 thousand marks. And taxpayers are a minority of the population. A strict execution of the treaty of peace would lead to national bankruptcy in Germany. The extent to which the German people will prefer the evils of high taxation to the evils of national bankruptcy depends on the Allies.

Germany will not recover for a number of decades at best. The rate of her recovery will determine not only the rate of reparation payments but also the rate of the restoration of Europe and even of the world at large. The world may not yet be a political unit but it undoubtedly has long been an economic unit. Rather it is an economic organism, which cannot flourish while a part of it is restricted or ceases to function. Germany's progress from 1871 to 1914 is an earnest of what she may achieve in the coming half century, not only for herself but for her former enemies. For the prosperity of both France and Great Britain before 1914 was promoted by the activities of their thriving neighbor. Whether Germany's prosperity will mean a renewal of military rivalries is for her republican regime to determine. But the lesson that in modern warfare, even the victors lose, is not likely soon to be forgotten.[86]

[86] Memorandum of the German Delegation, *id.*
Alfred Lansburgh, in Die Bank, June, 1919.
Dr. Carl Melchior, Frankfurter Zeitung, Dec. 30, 1919.

Part Two

CURRENCY AND CREDIT

CHAPTER V

PRINCIPLES AND PRACTICE IN THE WORLD WAR

A. Inflation and the Central Banks [1]

i. *How Inflation is Produced*

When war loans are subscribed for, out of the savings of the public, inflation does not result. When subscriptions are made out of loans at the banks, inflation is produced. In the former case, the banks merely transfer the credit from the public to the government. The subscribers receive bonds. The government in turn exchanges the credit for goods and services rendered. The recipients, munitions makers and others, return this credit to the banks. This procedure does not involve any increase of deposits. Moreover the munitions makers, themselves or through their employees and sub-contractors, may subscribe for bonds and repeat the cycle described. The repetition of this operation makes it possible for such large amounts of loans to be raised. However, when the banks themselves make advances to their customers to enable them to subscribe, credit is created. Similarly if the banks borrow from or rediscount at the central bank, using war paper as collateral, additional credit is created.

But credit is created by means other than subscriptions out of bank loans. During the late war the central banks of Europe made direct advances to their governments, when receipts from loans and from taxation were inadequate to meet expenses. The government gave the bank its securities, which became a bank

[1] First Interim Report of the Committee on Currency and Foreign Exchanges After the War (Cd. 9182), 1918, p. 4.

Address of Sir Edward H. Holden to the stockholders of The London City and Midland Bank, Supplement to the Statist, January 27, 1917.

debit or asset, and in return the government increased its deposits, which were credits or liabilities on the books of the bank. As the government drew on its account to pay for war goods and war services, the credit, government deposits, was transferred to private deposits. The above procedures constitute two methods of making fiat credit.

Inflation may be brought about through the issue also of fiat currency. In England the government itself issued currency notes, which were made legal tender but were inadequately backed by gold. The French government created fiat currency by a less direct process. It called upon the Bank of France for notes, which were issued against government securities. In Germany currency was manufactured not only by the government—*Reichskassenscheine*—but also bv the war credit institutions which were established.

ii. *Peace Conditions vs. War Conditions*

In normal times the inflation of credit is held in check by regulations which enable bankers to supply gold upon demand of depositors or noteholders. As credit expands, prices rise and with them the demand for legal tender currency, needed to conduct the increased volume of trade. The central banks of issue, then raise the discount rate, which has a double effect. Credit is contracted and prices consequently fall, for goods carried on credit are forced on the market. The decline in prices stimulates exports and checks imports and thus causes an inflow of specie. Furthermore, the rise in the discount rate of the central bank attracts foreign gold. The decline in the ratio of reserve to liabilities is thus checked. The convertibility into gold of paper money and of deposit credit restricts inflation within narrow limits. During the World War, the belligerents suspended gold payment and as a result the increase of fiat money and fiat credit continued without check.

In times of peace, newly established industries produce goods for consumption which are bought by wages paid in other industries. In times of war, munition plants produce no goods consumable by wage-earners. The stock of consumable goods remains stationary or even declines, whereas the volume of money increases. The result is a rise in prices. In times of peace, money for new industries comes from the surplus of other industries. In times

of war, money for new industries comes from taxation, or enforced saving, from loans, or voluntary savings diverted from industrial expansion, and from inflation, or stealing by the state. At the beginning of the war subscriptions to loans represent genuine transfer of control over goods and services from private hands to the government. The assets turned in represent real wealth. Toward the end of the war subscriptions for bonds are made out of borrowings or in the depreciated currency or credit. The subscriptions represent not real wealth but merely a share in the future goods and services of the nation. In times of peace the interest on an industrial bond represents genuine income, a portion of the surplus of industry. But in times of war the interest on a government loan does not represent a portion of a surplus, for the expenditures exceed the income of the nation.[2]

B. Government Bank Statements

i. *Changes in Statements of Banks of Neutral and Belligerent States*

A comparison of the statements of the banks before the war and after the war shows that the post-war holdings of specie were 1.80 times the pre-war holdings. Deposits rose to 4.53 times the pre-war figure. The notes of the central banks increased to 9.45 times the pre-war amount or if we include the paper money issued by the governments themselves, to 16.53 times. The fact that deposits and notes rose so much more in volume than gold and silver of the central banks is one of the evidences of inflation. The liabilities of the banks increased more than their real assets, gold and commercial paper. The huge volume of government promises to pay watered the assets. The ratio of gold and silver to notes and deposits of the central banks declined from 60.1 per cent before the war to 13.8 per cent after the war. These are the indicators of world-wide inflation, for the Allies, the Central Powers, and the neutrals on the several continents were all affected. However, the problem cannot correctly be presented as a world problem. The countries were not equally affected and each country must be studied in the light of the causes and manner of inflation within it. The solutions will also be different for the several groups.

[2] Lansburgh, A., Die grossen Notenbanken in Dienste der Kriegfuhrenden Staaten; p. 212. Die Bank, July, 1915, pp. 499-512.

The neutrals and inactive belligerents show some inflation of their metallic holdings, but their note circulation and deposits did not increase to a much greater extent than did their specie holdings. There was little currency inflation and credit inflation was not considerably greater than gold inflation. In the neutral countries listed the metallic holdings increased to 2.13 times the pre-war holdings, the deposits to 3.28 times, the circulation of the notes of the central banks alone to 2.93 times, and the circulation of the notes of both the central banks and of the government to 2.43 times pre-war figures. The fairly proportionate increase in specie and in note and deposit liabilities is indicated by the fact that the ratio declined only from 57.7 to 49.0 per cent. Some of the neutral countries, realizing that the inflation of prices was due to an increase in the gold holdings of the central banks, restricted the importation of gold.

The belligerents listed show a lesser increase in the gold and silver holdings than the neutrals, a greater increase in deposits, and a vastly greater increase in the note circulation of the central banks. If government issues are included the increase in notes becomes more disproportionate compared with the increase of gold. The holdings of gold and silver of the central banks rose 1.75 times, the deposits 4.59 times, the notes of the central banks 11.28 times, and the total note issue, including government notes, 19.76 times. The considerable margin between the increase in note and deposit liabilities and the increase in metallic holdings indicated inflation of credit and of currency. The ratio of specie to note and deposit liabilities in the banks declined from 61.2 per cent before the war to 11.9 per cent after the war.

If the belligerents are grouped, the banks of the Allied Powers show less inflation than those of the Central Powers. In the former case the gold holdings increased to 2.01 times the pre-war amount, the deposits to 3.39 times, the bank notes to 7.30 times, and all notes, including government issues, to 17.58 times. The ratio of metallic holdings to note and deposit liabilities declined from 62.0 per cent to 21.2 per cent.

The banks of the Central Powers present the poorest showing. The deposits increased to 10.85 times the amount before the war, the notes to 25.74 times, and if government issues are included to 28.86 times. On the other hand the specie holdings after the war were only 0.49 times the pre-war amounts. As a result the ratio of gold and silver holdings to the sum of note and deposit

liabilities declined from 57.5 per cent to 1.3 per cent. The decrease in the gold holdings was due to the exportation of gold to neutral countries during the war when the credit of the Central Powers was exhausted, and after the signing of the armistice to the surrender of gold, under the treaty, for the purchase of food, and to the theft by Roumania.

ii. *Changes in the Items on Bank Statements*

The specie holdings for all the countries listed increased to 1.80 times the pre-war amount; those of the neutrals and inactive belligerents, however, increased to 2.13 times and those of the belligerents to 1.75 times pre-war holdings. During the war gold moved from the belligerents to the neutrals. The holdings of the Allies increased to 2.01 times the amount before the war but the holdings of the Central Powers after the war were only 0.49 as great as before the war. The specie holdings of Roumania increased most, for the reason mentioned above, and those of Italy actually decreased. The relative increases ranged in the following order: Roumania, Greece, Japan, Great Britain, United States, Russia, Portugal, France, Finland, Belgium, and Italy. Turkey was the only one of the Central Powers which increased its metallic holdings (2.19 times). Austria-Hungary had only 0.19 times the gold holdings after the war that it had before the war. The increase in the gold holdings of the neutrals and the inactive belligerents varied less than that of any of the groups, if we exclude Brazil. Those of the Netherlands increased to 3.82 times pre-war holdings. The other countries, in the order of increase, were Switzerland, Denmark, Norway, Spain, Sweden, down to Argentina (2.03 times).

The deposits of the central banks of all the countries listed increased to 4.53 times the total deposits before the war but those of the neutrals and inactive belligerents increased to only 3.28 times. Naturally, among the belligerents there was greater inflation than among the neutrals. The deposits in the banks of the belligerent countries increased to 4.59 times, in the banks of the Allies to 3.39 times, and in the banks of the Central Powers to 10.85 times pre-war figures.

Within the group of Allied Powers the deposits of the bank of Roumania, increased most (83.00 times). The deposits of the bank of France increased least (2.38 times), because payment by check had not developed in France to any great extent. The countries

arranged in order of the increase of deposits are: Roumania, Belgium, Japan, Greece, Portugal, Italy, Finland, Russia, Great Britain, United States, and France. Within the Central Powers, the increase of deposits was as follows: Austria-Hungary 22.00 times pre-war amounts; Germany, 12.30 times; Bulgaria, 4.37 times; and Turkey, 1.14 times.

The notes of the central banks of issue in all the countries listed increased to 9.45 times pre-war figures, but in the neutral countries to only 2.93 times. The note circulation in the belligerent countries was increased to 11.28 times the amount before the war, that of the Allied countries to 7.30 times and that of the Central Powers to 25.74 times. Note inflation was least among the neutrals and greatest among the Central Powers.

Within the group of the Allies, the note circulation was increased most in Russia and least in Japan. The countries were ranged in the following order: Russia, Roumania, Finland, United States, Italy, Greece, France, Portugal, Belgium, Great Britain, and Japan. Within the Central Powers, the note circulation of Austria-Hungary increased to 28.20 times the pre-war circulation, in Germany to 27.36 times, in Bulgaria to 16.10 times, and in Turkey to 2.40 times. The increase in note circulation in the neutral countries and the inactive belligerents did not vary as widely as in the other groups and ranged from 3.42 times the circulation before the war in Norway down to 1.69 times in Argentina.

The addition of the notes issued by the governments themselves to those put out by the central banks brought about a greater inflation than the above figures show. The increase for all the countries was 16.53 times pre-war amounts but only 2.43 times in the neutral countries. The total note circulation in the belligerent countries after the war was 19.76 times the amount before the war, in the Allied countries 17.58 times, and in the Central Powers 28.86 times.

The inclusion of government paper money changes the position of Great Britain from tenth to third in the order of the Allied Powers and Belgium from ninth to fifth. On the other hand the United States put out practically no government paper during the war, and its position declined from fourth to ninth in the series. Among the Allied Powers Russia is first on the list with the largest increase in the total notes issued, and Japan last. The countries are ranged in the following order: Russia, Roumania,

Great Britain, Finland, Belgium, Italy, Greece, France, United States, Portugal, and Japan. Among the Central Powers the issue of paper by the banks was so great that even if we include the government issues the increases are not greatly changed, except for Turkey. The same applies to the neutrals and inactive belligerents.

Tables of pre-war and post-war figures of specie, deposits and note issues of certain central banks are given herewith:

TABLE OF PRE-WAR AND POST-WAR SPECIE AND DEPOSITS OF IMPORTANT BANKS OF ISSUE [8]

(in million dollars)

Country (a)	Pre-war date (b)	Post-war date (c)	Specie Holdings: Pre-war (d)	Specie Holdings: Post-war (e)	Specie Holdings: Ratio (e):(d) (f)	Deposits: Pre-war (g)	Deposits: Post-war (h)	Deposits: Ratio (h):(g) (i)
ALLIED POWERS								
United States	Mar. 30, 1917	July 16, 1920	947	2119	2.24	707	1,687	2.39
Great Britain	July 29, 1914	July 14, 1920	186	598	3.22	327	872	2.67
France	July 30, 1914	July 15, 1920	920	1126	1.25	257	611	2.38
Italy	July 31, 1914	Feb. 10, 1920	288	223	0.77	41	152	3.70
Russia	July 8, 1914	Oct. 16, 1917	937	1948	2.08	566	1,779	3.14
Japan	Aug. 1, 1914	May 15, 1920	109	459	4.21	76	756	9.55
Belgium	July 30, 1914	June 24, 1920	61	69	1.13	24	391	16.30
Greece	Mar. 13, 1914	May 13, 1920	45	294	6.54	45	256	5.69
Roumania	Mar. 29, 1914	May 1, 1920	41	293	7.15	5	415	83.00
Portugal	Mar. 31, 1914	May 5, 1920	18	29	1.61	8	41	5.12
Finland	Mar. 31, 1914	June 15, 1920	7	8	1.14	5	17	3.40
Total Allied Powers	....	....	3559	7166	2.01	2061	6,977	3.39
CENTRAL POWERS								
Germany	July 23, 1914	June 23, 1920	402	260	0.65	225	2,756	12.30
Austria-Hungary	July 30, 1914	Mar. 7, 1920	312	58	0.19	59	1,295	22.00
Turkey	Dec. 31, 1913	Dec. 31, 1918	21	46	2.19	70	80	1.14
Bulgaria	Mar. 31, 1914	Feb. 29, 1920	25	10	0.40	44	192	4.37
Total Central Powers	....	....	760	374	0.49	398	4,323	10.85
Total belligerents	....	....	4319	7540	1.75	2459	11,300	4.59
NEUTRALS (including Brazil)								
Argentina	Mar. 31, 1914	May 26 1920	224	455	2.03			
Brazil	Mar. 31, 1914	May 31, 1920	125	31	0.25			
Denmark	July 31, 1914	May 31, 1920	21	61	2.90	....	10	
Netherlands	July 25, 1914	June 28, 1920	68	261	3.82	2	58	29.00
Norway	July 31, 1914	June 15, 1920	14	40	2.86	4	38	9.50
Spain	July 24, 1914	June 26, 1920	246	593	2.41	96	224	2.43
Sweden	July 25, 1914	June 26, 1920	29	70	2.41	18	74	4.11
Switzerland	July 23, 1914	June 23, 1920	38	120	3.16	10	23	2.30
Total neutrals	....	....	765	1631	2.13	130	427	3.28
Grand total of powers listed	....	....	5084	9171	1.80	2589	11,727	4.53

[8] Based on Gottlieb's figures in American Economic Review, Sept., 1920, giving original sources.

TABLE OF PRE-WAR AND POST-WAR CIRCULATION OF NOTES OF IMPORTANT BANKS OF ISSUE AND OF THEIR GOVERNMENTS

(in million dollars)

Country	Bank Notes in Circulation			Ratio of Specie to Note and Deposit Liabilities		Total Bank and Government Notes in Circulation		
	Pre-war (*a*)	Post-war (*b*)	Ratio (*b*):(*a*) (*c*)	Pre-war (*d*)	Post-war (*e*)	Pre-war (*f*)	Post-war (*g*)	Ratio (*g*):(*f*) (*h*)
ALLIED POWERS								
United States	357	3,136	8.80	89.0	43.9	715	4,017	5.62
Great Britain	145	605	4.17	*39.4	*40.5	223	2,616	11.73
France	1290	7,252	5.62	59.5	14.3	1290	7,252	5.62
Italy	421	2,974	7.10	62.3	7.1	518	3,593	6.94
Russia	842	9,457	11.20	66.5	17.3	842	50,156	59.57
Japan	163	590	3.56	45.6	34.1	163	720	4.42
Belgium	216	997	4.62	25.4	5.0	216	2,059	9.53
Greece	44	268	6.08	50.6	56.1	44	268	6.09
Roumania	84	875	10.42	46.1	22.7	84	2,608	31.05
Portugal	90	433	4.82	18.4	6.1	90	433	4.81
Finland	23	234	10.18	25.0	3.2	23	234	10.17
Total Allied Powers	3675	26,821	7.30	62.0	21.2	4208	73,956	17.58
CENTRAL POWERS								
Germany	450	12,294	27.35	59.6	1.7	538	15,720	29.22
Austria-Hungary	432	12,148	28.20	63.5	0.4	432	12,148	28.12
Turkey	5	12	2.40	28.0	50.0	5	726	145.20
Bulgaria	36	581	16.10	31.3	1.3	36	581	16.13
Total Central Powers	923	25,035	25.74	57.5	1.3	1011	29,175	28.86
Total belligerents	4598	51,856	11.28	61.2	11.9	5219	103,131	19.76
NEUTRALS (including Brazil)								
Argentina	342	578	1.69	65.5	78.7	342	578	1.69
Brazil	175	568	3.25	71.4	5.5	175	568	3.25
Denmark	42	138	3.28	50.0	41.2	42	138	3.29
Netherlands	125	404	3.24	53.5	56.5	125	404	3.23
Norway	33	113	3.42	37.8	26.5	33	113	3.42
Spain	370	747	2.02	52.8	61.1	370	747	2.02
Sweden	56	181	3.23	39.2	27.4	56	181	3.23
Switzerland	52	171	3.29	61.3	61.9	52	173	3.33
Total neutrals	1195	2,900	2.93	57.7	49.0	1195	2,902	2.43
Grand total of powers listed	5793	54,756	9.45	60.1	13.8	6414	106,033	16.53

* For the consolidated issue and banking departments.

The ratio of metallic holdings to the sum of note liabilities and deposit liabilities of the central banks shows the relative inflation. For all the countries listed the ratio declined from 60.1 per cent before the war to 13.8 per cent after the war. But for the neutrals, the ratios before and after the war were 57.7 per cent and 49.0 per cent, respectively; the increase in paper currency and in deposits did not greatly exceed the increase in the gold holdings of the neutrals. The ratio for the belligerents was 61.2

per cent before the war and 11.9 per cent after the war. But the Central Powers show a worse disorganization after the war, the ratio declining from 57.5 per cent to 1.2 per cent. For the Allied Powers the ratio of metallic holdings to note and deposit liabilities combined declined from 62.0 per cent to 21.2 per cent.

C. Effects of Inflation on Prices

The indices of inflation are a rise in prices, a depreciation of the rates of exchange, and a premium on metallic money. Only the first of the three effects named will be considered here. The others will be discussed under foreign exchange.

The close relation existing between the inflation of credit or of currency and a rise in prices becomes evident when the increase in inflation is compared with the increase in prices. A table prepared in a White Paper of the British Board of Trade (Cd. 734 and 434) shows a close parallelism between currency expansion and price movements.[4] The United States experienced the least increase in currency and the least increase in wholesale and retail prices. France and Italy, on the other hand showed the greatest increases in currency and in prices.

Country	Latest date	Currency of all kinds (1913=100)	Wholesale prices (1913=100)	Retail prices of food (1914=100)
United States.....	Mar., 1920	177	253.0	196
United Kingdom..	Mar., 1920	250	321.8	235
Switzerland.......	Dec., 1919	253	....	237
Denmark.........	Jan., 1920	255	....	251
Japan............	Oct., 1919	274	266.3	
Sweden..........	Mar., 1920	275	354.0	291
Netherlands......	Feb., 1920	290	....	199
Norway..........	Feb., 1920	305	....	294
France...........	Feb., 1920	400	522.4	297 (Paris)
Italy............	Dec., 1919	565	452.6	252

[4] See also the London Economist, Nov. 29, 1919, p. 978; June 12, 1920, p. 1288.

Retail prices of food rose less than general wholesale prices in part because of the policy of price-fixing and also because of the subsidizing of food prices. In the case of the United Kingdom the circulation at the outbreak of the war, is used as a basis of comparison.

Commerce Reports, July 30, 1920, reprinted a part of this report.

The reader may find a similar parallelism by using the price indices and the bank statements appearing in the Federal Reserve Bulletin.

The close correspondence between the increase in the currency and the rise in prices in various countries can be traced by a comparison of international price fluctuations before the war and during the war. Prof. Wesley C. Mitchell showed that the general course of wholesale price fluctuations in the United States, England, France, and Germany was, broadly speaking, similar in the 21 years, 1890-1910. The index numbers for these four countries all decline in the middle of the nineties to the lowest point in the period, all rise in the later nineties, all fall at some time between 1900 and 1904, all rise sharply to a new maximum in 1907, all drop in 1908, and all rise once more between 1908 and 1910. During the 21 years the extreme differences in prices in the four countries were as follows:[4a]

Between prices in—	Points	Year
England and America	10	1902
France and America	6	1901
Germany and America	7	1902
England and France	5	1900
England and Germany	6	1900
France and Germany	8	1910

A point is 1/100 of a price index number based on the average price levels of 1890-1899 and taken as 100.

This close correspondence between prices in the United States and in the three countries of Europe does not hold for the period of the war. The differences become far greater. The extent of the variation in prices corresponds with the degree of inflation. Using the medians of relative prices of identical lists of commodities, 150 in the British comparison, 44 in the French comparison and 30 in the German comparison, Prof. Mitchell prepared average prices for

[4a] Mitchell, Wesley C., International Price Comparisons. Washington: Government Printing Office, 1919, pp. 13, 17, 18, 29 and 43.

See also his Index Numbers of Wholesale Prices in the United States and Foreign Countries. Washington: Government Printing Office, 1915. Part III.

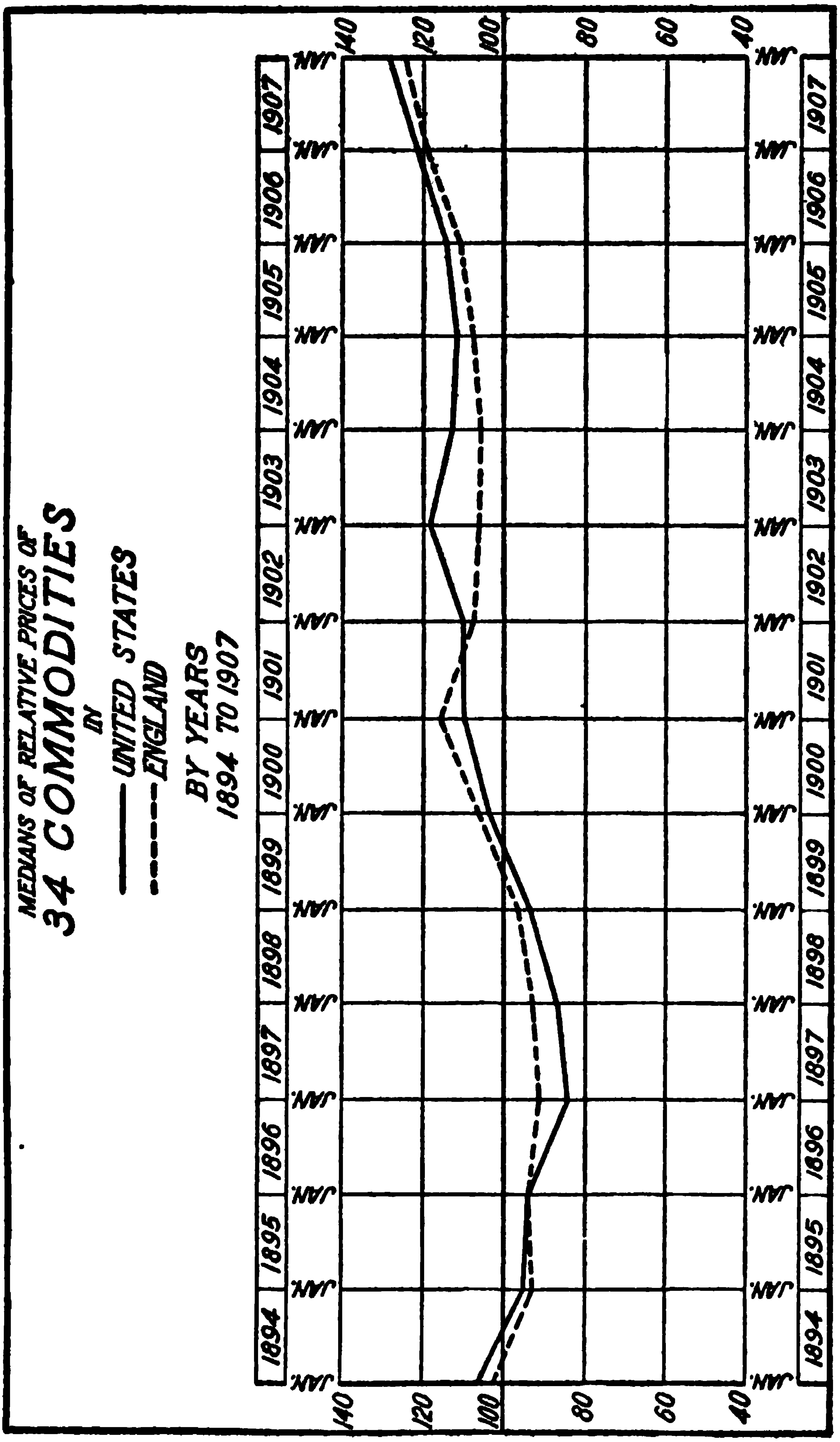


FIGURE I

100 represents average price index, 1890–1899

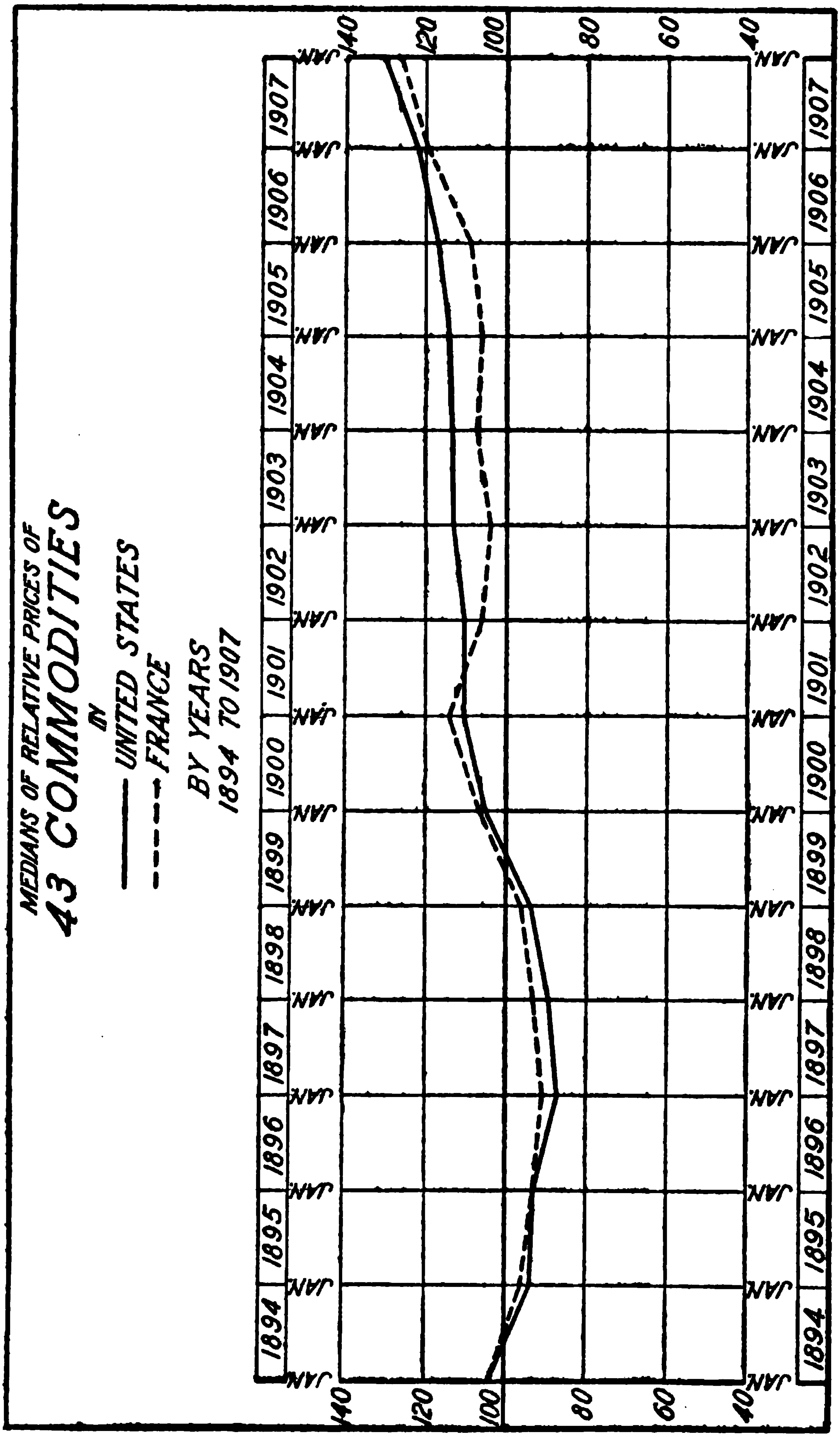


FIGURE II
100 represents average price index, 1890–1899

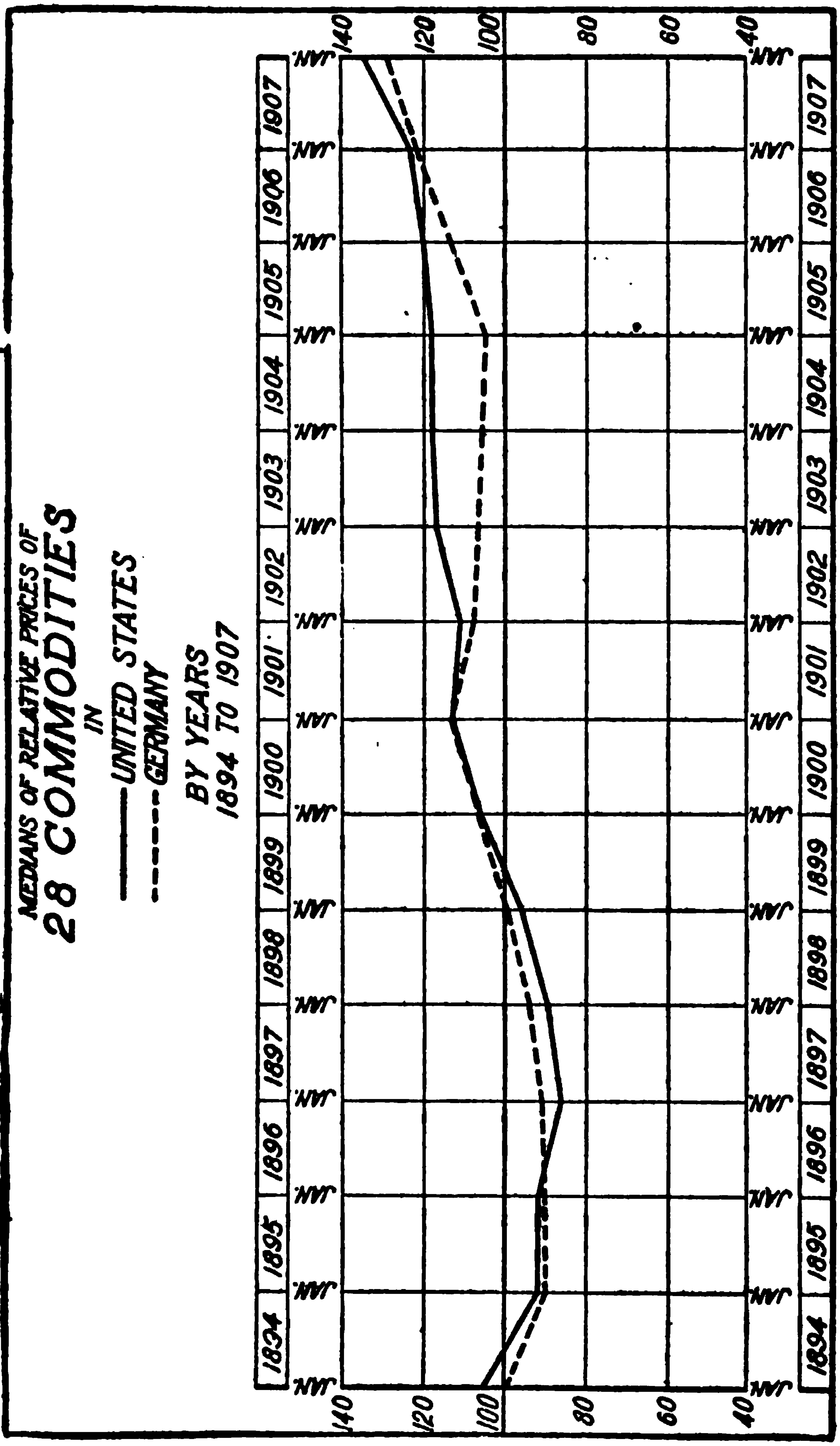


FIGURE III

100 represents average price index, 1890–1899

the years 1913 to 1918. A condensed summary of his tables follows:

COMPARATIVE INDEX NUMBERS OF WHOLESALE PRICES

Countries	1913	1914	1915	1916	1917	1918
United States............	101	100	108	148	202	208
Great Britain............	101	100	128	171	214	242
Difference............	0	0	20	23	12	34
United States............	101	100	102	134	176	201
France..................	101	100	119	170	226	268
Difference............	0	0	17	36	50	67
United States............	101	100	103			
Germany................	102	103	137			
Difference............	1	3	34			

Great Britain shows the least deviation from American prices, France shows a considerably greater deviation. For the year 1915 Germany shows the greatest deviation. Later figures for Germany were not compiled. The explanation of the spread in prices is that France resorted to fiat credit to a greater extent than England, and Germany produced a veritable flood of credit by means of legislation at the outbreak of the war. The table of the British Board of Trade as well as that of Prof. Mitchell corroborates the theory that the expansion of the currency and the rise in prices closely parallel each other.

The International Financial Conference at Brussels held in September, 1920, published figures showing the percentage of changes in prices and in note issues. Evidence of the close parallelism between the increase of notes issued and the increase of prices is afforded by the table showing these increases for the years 1914 to 1919.

The United States shows the smallest increase in both prices and note issues and Italy shows the largest increase. Price increases lagged behind note increases except in the United States, where deposit banking has developed and payment by check is more common than in the other countries listed.

RELATIVE PRICES AND NOTE ISSUES[5]

(1913 figures = 100)

Year	United States		Canada		Japan		Sweden		France		Italy	
	Prices	Note issues	Prices	Note issues	Prices	Note issues	Prices	Note issues	Prices	Note issues	Prices	Note issues
1914	100	101	106	118	91	90	116	131	116	117	101	129
1915	101	109	118	136	108	101	145	149	169	233	170	181
1916	124	124	151	155	131	141	185	190	206	292	234	227
1917	176	151	187	206	166	195	244	253	309	391	365	366
1918	196	157	211	239	214	256	339	360	358	530	437	499
1919	214	172	236	251	289	296	330	329	429	652	457	667

[5] Table C, p. 9, Paper III, Currency Statistics, International Financial Conference, London: Harrison & Sons, 1920.

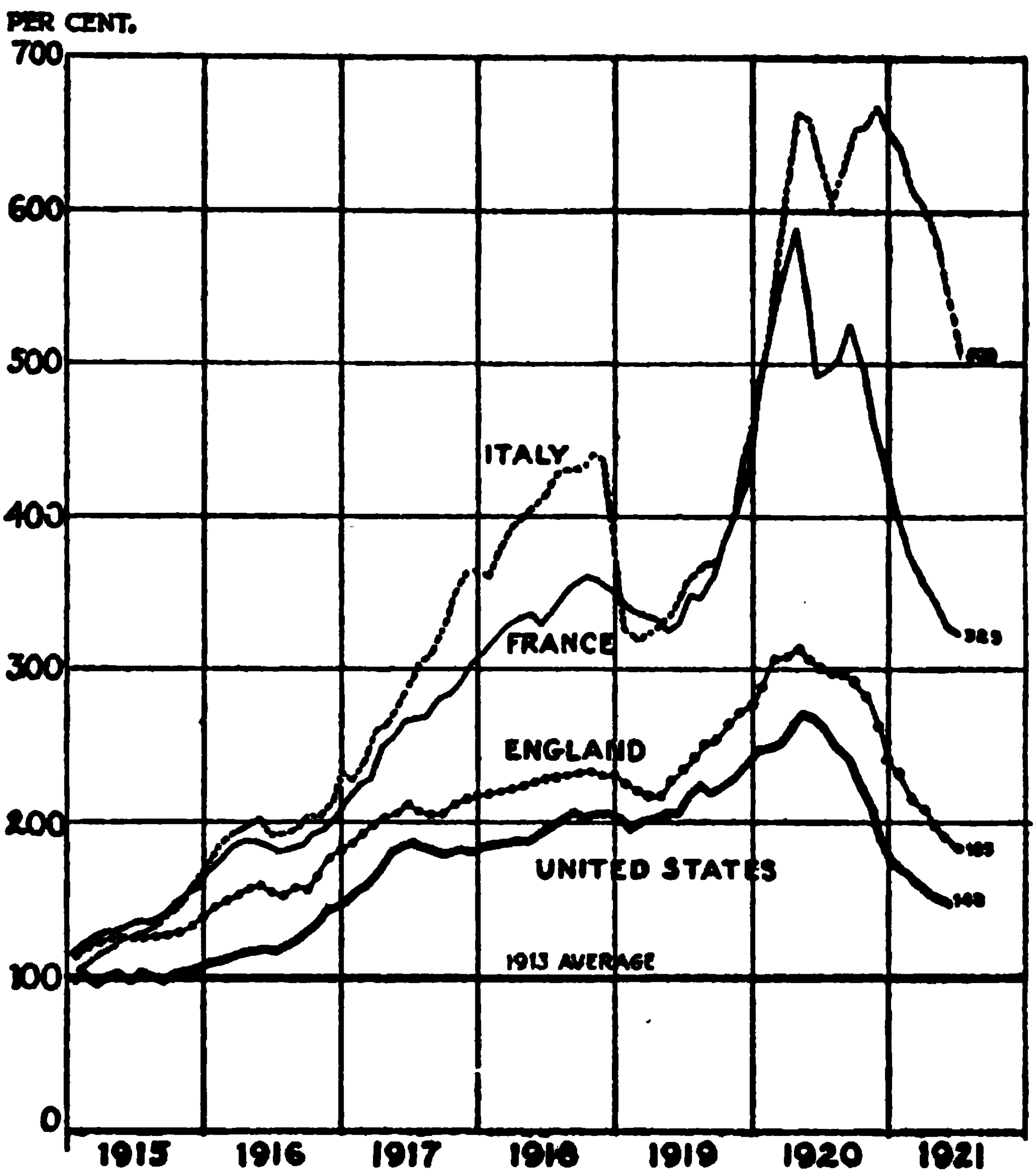


FIGURE IV

WHOLESALE COMMODITY PRICES IN FOUR COUNTRIES

Average Prices in 1913 = 100 Per Cent

D. Prospects and Remedies

The subject of reorganization of the finances of Europe will be treated separately, but a brief survey will be given here.

i. *The Prospect*

The new countries of Europe are following the methods of faulty finance which the established nations pursued during the war. Poland, hardly a year old, has a national debt of mk. 130,000 million and a budget deficit of mk. 40,000 million. The post-war period will be marked by the same developments as those which followed the Civil War and the Napoleonic Wars, when speculation was rife and people expected prices to remain at a high level, but deflation continued with only slight interruptions until the pre-war levels were reached.

The outlook is as different for the several countries as their methods of war finance. Those countries which did not resort to very extensive inflation will probably be able to resume specie payment after a relatively brief interval, following the example of Great Britain after the Napoleonic Wars and the United States after the Civil War. At the other extreme are the countries that relied almost exclusively on fiat credit and on fiat currency, for whom the sole relief will be some drastic measure such as a capital levy, a forced loan, revaluation of the currency, or even repudiation. Austrian krone notes were used as labels on beer bottles in Zurich, Switzerland, in 1921. The countries between these two extremes may struggle along indefinitely with a paper currency, fluctuating erratically with respect to gold like that of various countries in South America.

ii. *Policies*

In the present discussion of policies, only national factors will be taken into account. International financial coöperation seems impracticable and premature. As early as August, 1918, the outlines of a sound post-war financial policy were presented by the Cunliffe Committee in Great Britain. This, in general, was a forerunner of later proposals in other countries, which are in substantial agreement with its recommendations. There is little

difference of opinion among students of finance as to the course necessary to adopt after the war.

The Cunliffe Committee pointed out the automatic operation before the war of an effective gold standard in correcting undue expansion of credit and deviation of the foreign exchange rates. As a result of government borrowing during the war and of the unlimited issue of paper currency the gold standard ceased to exist. The committee recommended that an effective gold standard be restored, otherwise there would be danger of progressive credit expansion which would jeopardize international trade relations. The prerequisites for the restoration of an effective gold standard were (a) the cessation of government borrowing and the reduction of the floating debt, (b) the raising of the discount rate of the central bank and its use to check speculative expansion of credit, and (c) the cessation of the issue of fiduciary currency.

The official joint statement of five of the leading economists of Europe, submitted to the League of Nations, advocates the same policy. The inflation of credit and currency should cease. Government expenditures must be reduced, not only for the army and navy, but also for the subsidies on particular commodities and services. The state budgets, must be made to balance and current expenses met, not out of loans, but out of income. Floating debts should be funded. The creation of new currency must cease and with it the artificially low bank rates abandoned.

Of similar tenor is the Memorandum of the British Board of Trade, a survey of the economic condition of Europe after the war. "The question primarily is the concern of the several national governments, assisted where possible and necessary by international action. National solvency requires that public expenditure and receipts be brought into equilibrium, and that borrowing, except for the most essential services, should cease. The maintenance of sound currency equally demands the discouragement of all influences tending to create inflation and especially government borrowings. The withdrawal of much of the excessive depreciated circulating media, and the limitation of future issues is equally one of the primary duties of the newly established government. Until this is achieved stable conditions cannot be realized."[6]

[6] Board of Trade Journal, June 3, 1920, contains an abstract of this report.

(a) *Credit and Currency Before and During the War*—

Before the war, the volume of note circulation and of deposit liabilities was restricted by the maintenance of a specific relation between these liabilities and the gold reserves of the banks of issue. A rise in the discount rate caused the contraction of loans, and therefore of deposits, and simultaneously it increased the gold reserve by attracting foreign funds. The Bank of France regulated the gold supply not so much by changing the rate of discount as by charging a premium on gold to be exported.[7] A lowering of the discount rate stimulated enterprise, increased loans and deposits, and facilitated the export of gold.

During the war the principle of limiting note and deposit liabilities by means of the gold reserve was abandoned. Gold payments were suspended directly or indirectly, practically everywhere. High discount rates were no longer needed to protect gold reserves. Low interest rates were established to facilitate the financial operations of belligerent governments. The free movement of gold before the war not only governed domestic credit and currency, but regulated the foreign exchanges. Fluctuations did not exceed the cost of settling in gold.

The results of the abandonment of the gold standard were twofold. At home inflation ensued, prices rose, and government credit was weakened. Abroad, exchange rates moved adversely. To check the evils of inflation, price fixing and rationing were introduced fairly effectively. To overcome the effect of adverse exchange in increasing the cost of imported essential goods, the belligerents sold securities accumulated before the war, raised private loans abroad, and established a preferential discount rate to attract foreign funds, and finally when these means were exhausted, the belligerent governments borrowed of foreign governments associated with them in the war. All these measures merely postponed and really aggravated the ultimate fall of exchange rates to a level at which they conformed to the relative purchasing power of the currencies of the several countries.

(b) *Post-War Policies*[8]—

There is little difference of opinion on the point that stable

[7] Conant, p. 65, 5th Edition.

[8] Warburg, Paul M., Fiscal and Currency Standards as the Future Measure of the Credit of the Nations. Address before Second Pan-American Financial Conference, January 22, 1920.

conditions can be restored only by balancing budgets and as a corollary ceasing to issue further government loans or additional paper money, by digesting government loans and paper held in the banks, and by restoring the free movement of gold.[9]

The free movement of gold is the last step, for gold exports from a country having huge note issues would create financial chaos. The first step toward a re-establishment of financial stability is the balancing of the budget, by increasing income or by decreasing expenditure or both. There is an intimate relation between fiscal policy and financial stability.

Through popular subscription provision must be made for funding the floating indebtedness, and for pulverizing the large blocks of government securities held by the banks. With their portfolios gradually rid of government loans, the banks become able to place their resources at the service of trade. As government paper diminishes among the assets of the bank, the offsetting deposit credit is reduced. Either bank notes may be retired or deposits decreased. Popular loans will accomplish this result quickly. Retirement through taxation, that is, through an excess of national revenue over national expenditure, will achieve this end more slowly. Under either method eventually the balance sheets of the banks will again, as before the war, show a small per cent of assets in government securities and a large per cent in commercial paper. When this stage has been reached, the effective discount rate may be restored, gold shipments resumed, and foreign exchange stabilized.

Those countries whose note circulation and deposit liabilities are greatly inflated can not follow this procedure. Many years will have to elapse before they can retire the excess of notes, either by taxation or by funding, or reduce the holdings of government securities, chiefly short-term notes against which deposit credits have been created. For these countries attempts at deflation

[9] An occasional dissenting opinion is registered. Walter Leaf, at a meeting of the stockholders of the London County and Westminster Bank said: "I am no believer in proposals for artificial restriction of the currency. To say that the total issue of treasury notes shall not exceed an arbitrary amount seems to me useless. So long as the government is freely issuing claims for currency, it must supply the currency to meet them. To fix an upper limit would merely bring us to a point when the banks would find themselves unable to meet the demands for notes and we should have to choose between bankruptcy and a removal of the restrictions. You can't cure a fever by plugging your clinical thermometer at 'normal.'" Financier, August 11, 1920.

slowly must be abandoned for it is hopeless to try to restore the pre-war gold value of the monetary unit. The simplest procedure, perhaps the only course possible, is to revalue the monetary unit at approximately its current value in gold as was done in the case of the Argentine paper peso.

Suggestions for stabilization of prices at their present level are futile. The free movement of gold is possible only if an inordinate amount is not required for settling trade balances. The world supply of gold was adequate for this purpose before the war when prices were at a lower level than at present. The stabilization of prices would necessitate the abandonment of gold as the governor of the machinery of international credit. No adequate substitute has ever yet been found. Some statesmen and publicists have advocated the maintenance of the inflated currencies until the volume of goods produced is sufficient to require the existing volume of currency. This proposal also is futile. There are varying degrees of inflation in the several countries and production cannot be increased in varying proportions in each of them. Again the rise in the price level during the war was greater than the price increases of a century or more. Whereas sudden deflation may be "a terrible end," the proposal to stabilize prices until time overtakes them would constitute "an endless terror." In the relation between goods and paper money, between commodities and tokens, the former are primary, and the latter must conform to fluctuations in production and not determine them. Theoretically, present price levels might be maintained, if a supply of gold equal to the existing supply of paper were discovered. Practically, stabilization is impossible.

CHAPTER VI

BRITISH CURRENCY AND CREDIT

This chapter will treat of as much of the development and organization of British banking before the war as is necessary to understand the main topics, namely, the effect of the war on British credit and currency, the legislation enacted to meet the war emergency, the changes in the statements of the Bank of England, the effects of inflation, and the post-war policy.

A. THE BANK OF ENGLAND, DEVELOPMENT AND ORGANIZATION

The origin of the Bank of England[1] may be traced to the proposal in 1691 of William Paterson, a Scotchman, who offered to advance £1,000,000 to the government on the condition that it pay him £65,000 annually to cover interest and cost and that it give him authority to issue bills which should be legal tender. The act establishing "The Governor and Company of the Bank of England" was passed in 1694. The checkered history of the institution will not be traced here. Until 1826 the Bank of England had a practical monopoly of all joint-stock banking in England. The act of 1826 permitted the establishment of joint-stock banks of issue beyond the radius of 65 miles from London. The act of 1833 permitted any corporation or partnership to carry on banking in London itself or within the 65-mile radius on the condition that it did not issue notes. The act of 1844 gave the Bank of England the exclusive right of note issue but permitted existing banks of issue to maintain their outstanding circulation at the same time providing for the contingency of the retirement of this circulation. In the event of such retirement the Bank of England might increase its note issue by an amount not in excess of two-thirds of the bank notes retired.

The Bank of England, as remodeled by the act of 1844, has two separate departments, the issue department and the banking de-

[1] Conant, Chap. iv and v.

partment. The theory of this separation is that an expansion of note issues by private bankers had caused panics and that therefore panics may be prevented by confining the right of issue to the Bank of England and by limiting bank note issues above a fixed sum to a paper pound for every gold pound. The theory is that notes and deposits are distinct in their effect in expanding the demand liabilities of the bank. "The currency principle" was the basis of the separation. The bank note became merely a certificate of coin and commercial paper became the instrument of credit which the bank note previously had been, under the regime of unrestricted issue by private bankers.

By the act of 1844 government securities to the value of £14,000,000 were transferred to the issue department, as well as the gold coin and bullion held in the banking department in excess of its requirement. The issue department then turned over to the banking department the equivalent amount in notes. Thereafter, notes and coin or bullion became interchangeable at a fixed rate at the issue department. As a result of the retirement of the outstanding issues of the joint-stock banks the fiduciary circulation of the Bank of England has increased from £14,000,000 to its present level, £18,450,000. The weakness of the act was revealed by the crisis of 1847, when it failed to function according to the theory of its sponsors. It did not limit speculation because credit expansion was possible not only through note issues but also through deposits and loans. Speculation therefore was not prevented. Furthermore the theory that the amount of gold would fluctuate with the amount of notes likewise failed because gold was obtainable at the bank, by the presentation not only of notes but also of checks. Indeed, the effect of the act in time of panic was to hasten the withdrawal of deposits from the joint stock banks before the gold supply could be withdrawn by the presentation of outstanding notes. At such occasions the bank act was suspended and notes issued to any desired extent without requiring a corresponding deposit of gold. The act of 1844 which restricted note issues but not deposits hastened the development of deposit banking. The Cheque Bank was established soon thereafter, received money on deposit, and issued books of checks, limited to the amount of the deposit. Another development of interest was the use of a rise in the interest rate in inducing an inflow of funds and thus maintaining an adequate gold reserve in times of stringency of credit.

English credit rests upon the gold reserve of the Bank of England because the private and joint-stock banks do not maintain a separate gold reserve. They carry as much cash as is needed to transact daily operations and carry the balance at the Bank of England. The joint-stock bank rediscounts at the Bank of England and can draw against this deposit and obtain notes, convertible into gold. The Bank of England can control the money market not only by changing the discount rate but also by borrowing in the market, that is, by selling a part of its holdings of consols for cash and buying an equal amount for future delivery for the monthly account. The excess funds of the market are thus absorbed, and the market rate for money is forced up. The consols sold are returned to the bank at the monthly settlement.[2]

The Bank of England is governed by 24 directors, a governor and a deputy governor who are usually senior directors. In addition to its banking functions the bank acts as agent of the government, receives public deposits and acts as the banker of the state, though not as its cashier.

The Bank of England is a bankers' bank. All the credit institutions, the joint-stock banks, the discount houses, the bill brokers, and the acceptance houses rely upon it for rediscounting bills. These bills may arise out of trade with various parts of the world. In addition to commercial bills, finance bills are also drawn on London by bankers in many parts of the world. London is the world's clearing-house for foreign bills. It is a great center in the trans-shipment or re-export trade. Interest on Britain's vast foreign investments and British loans to the Continent for use in stock-exchange transactions before the war were additional factors which made London a sort of governor of the international financial machinery. The British bank rate was quick to register changes in foreign financial conditions.

B. War-Time Legislation and Expedients

The feature of the days just before the war, in financial terms, was a decline in stocks on the exchanges in Vienna, in Berlin and then in Paris, followed by the closing of the stock exchanges in Vienna, Budapest, Brussels, Antwerp, Montreal, Toronto and Madrid by July 28. On July 29 quotations were discontinued in

[2] Conant, History of Modern Banks of Issue, Fifth Edition, p. 137.

Berlin, the next day the exchanges in Petrograd and in South America closed. On July 31 the stock exchanges of London, Paris, and New York closed. In this chaos, with collateral underlying stock-exchange loans shrinking, and with British bills on the Central Powers uncollectible, the banks retrenched, called loans and withdrew funds.

i. *The Moratorium*

On August 2, for the first time in English history, a moratorium for one month was proclaimed, and on August 3 legalized by the Postponement of Payments Act. The law covering the general moratorium reads (Ch. II, 4 and 5 Geo. 5):

"His Majesty may by proclamation authorize the postponement of the payment of any bill of exchange or of any negotiable instrument, or any other payment in pursuance of any contract, to such extent, for such time, and subject to such conditions as may be specified in the proclamation."

By Royal Proclamation of August 6 it was directed that the moratorium should not apply to payment of wages or salary, a liability not exceeding £5, taxes, maritime freight, debt from any person, firm, company or institution outside the British Islands, dividend or interest on Trustee Act Investments, liability on bank notes, old-age pensions, or other payment to be made by the government, payments under the Insurance Act and under the Workmen's Compensation Act, or payments of deposits in savings banks.[3]

By a series of proclamations under the moratorium act, payments which were due up to September 3 were postponed to November 3. This, however, did not apply to the payment of rent, or to the payment to or by a retail trader. However, under the (Emergency Powers) Act of August 31, 1914, "no person shall proceed to execution on any judgment for the recovery of a sum except after application to the court or enter into any property, realize any security, forfeit any deposit, or enforce the lapse of any insurance policy for the recovery of any sum of money except after application to the court." The court had discretion to stay execution for such time as it thought fit.[4]

[3] Withers, Hartley, War and Lombard Street, pp. 133, 136, 137, 142, 145. Readers who lack access to the British Statutes will find the early financial legislation of the war here.

[4] Withers, *ibid.*, pp. 162-165.

The moratorium stopped the machinery of finance in order to avoid bankruptcies. Remittances to London from many parts of the world had stopped. The foreign exchanges were upset and bankers were deterred by fear from discounting bills. To terminate the deadlock and to enable trade and commerce to resume its normal course, the Bank of England agreed to discount any approved bill of exchange accepted before August 4 without recourse to the holder and upon its maturity to assist the resumption of normal business by giving the acceptor opportunity of postponing payment, interest being payable at 2 per cent over the bank rate.[5]

The Bank of England agreed to provide the acceptors with funds to pay approved pre-moratorium bills at maturity, thus releasing the drawers' and endorsers' of such bills from their liability, except their liability for payment to the acceptors. The acceptors were to collect from their clients as soon as possible and to apply the funds to repay advances made by the Bank of England, on which the interest charged was 2 per cent above the ruling bank rate. On its part the Bank of England agreed not to claim repayment of any amount not recovered by the acceptors from their clients for a period of one year after the close of the war. Until the end of this period the Bank of England's claim was to rank after claims on post-moratorium transactions. In order to facilitate new business, the joint-stock banks arranged, with the co-operation of the Bank of England and the government, to advance to clients the amounts necessary to pay their acceptances at maturity where the funds had not been provided in due time by the clients of the acceptors.[6]

The government guaranteed the Bank against any future losses that it might incur under this arrangement by agreeing to charge them against the public debt.

ii. *Suspension of the Bank Act*

The financial disturbance caused a withdrawal of funds. Depositors, however, received only 10 per cent in gold and 90 per cent in the notes of the bank. However, these notes were convertible into gold at the issue department, and as there was no bank

[5] Notice published on August 13, 1914, concerning the discounting of bills by the Bank of England.

[6] From a Statement of the Treasury, September 3, 1914.

note under £5 note holders besieged the issue department and demanded gold coin. On August 6 the bank act was suspended and the bank "temporarily authorized to issue notes in excess of the limit fixed by law"; the bank was discharged from any liability in connection therewith.

iii. *Issue of Currency Notes*

The unlimited issue of notes of the Bank of England, particularly had small denominations been provided for, would have satisfied the demand for notes. This course was adopted in France, and with the exception of a small increase in the Reichskassenscheine it was also the course adopted in Germany. The issuing banks in both cases merely increased the supply of notes, but the government issued none. England went one step further. On August 6, 1914, the Currency and Bank Note Act was passed. This authorized the Treasury itself to issue currency notes for £1 and for 10s. which would be legal tender in any amount. To meet the immediate exigencies, postal money orders were made legal tender up to any amount. Legally and theoretically, the holder of a currency note might "obtain on demand during office hours at the Bank of England payment for the note at its face value in gold coin." This, of course, was not the practice. Currency notes were issued through the Bank of England to bankers to a maximum limit of 20 per cent of their liabilities on deposit and current accounts. The amount issued was treated as an advance by the Treasury and bore interest at the ruling bank rate. The bank might repay, at will, notes advanced. The amount advanced was a floating charge on the assets of the bank. The banks might obtain certificates or book credit with the Bank of England in lieu of and on the same terms as actual currency notes. A redemption account for the notes was opened consisting partly of coin and bullion, Bank of England notes fully covered by gold, and government balance at the Bank of England, but chiefly of government securities.

C. The Bank of England During the War

i. *The Bank Statement and the Currency Situation*

The statements of the Bank of England during the war furnish, in conjunction with the currency note account, a picture of the

growth of inflation. A brief discussion of the form of the statement of the Bank of England will be helpful in understanding the changes during the war.

STATEMENT OF THE BANK OF ENGLAND AS OF SEPTEMBER 15, 1920
(in thousand pounds sterling)

ISSUE DEPARTMENT

Assets		Liabilities	
Government debt	11,015	Note issue	140,008
Other securities	7,435		
Gold coin and bullion	121,558		
Total	140,008		140,008

Ratio of gold to notes issued 86.6%

BANKING DEPARTMENT

Government securities	56,103	Proprietors' capital	14,553
Other securities	83,391	Rest (surplus)	3,529
Notes	14,843	Public deposits	15,202
Gold and silver coin	1,536	Other deposits and bills	122,589
Total	155,873		155,873

Ratio of gold and notes to liabilities 11.9%

The Bank of England gives 11.9 per cent as its ratio of reserve to liabilities. This applies to the banking department only and is the ratio of the notes and gold in the banking department to the sum of its liabilities, public and other deposits and bills. In the issue department, the ratio of gold coin and bullion to notes issued is 86.6 per cent. If now, the issue and banking departments are consolidated and if the notes held as assets in the banking department are subtracted from the total note liabilities in the issue department so as to get the net liability on notes in circulation, the ratio of total gold and silver to total note and deposit liabilities is 46.8 per cent.[7]

[7] Unaware of this fact, some American business men chided the Federal Reserve Board for raising the discount rate, and for its inability to operate on lower rates, with a reserve in excess of 40 per cent, when the Bank of England was operating on a reserve, they thought, of 12 per cent.

STATEMENT OF ISSUE AND BANKING DEPARTMENTS COMBINED AS OF SEPTEMBER 15, 1920

(in thousand pounds sterling)

Gold	123,093	Proprietors' capital	14,553
Securities for uncovered circulation	18,450	Rest (surplus)	3,529
Government securities	56,103	Notes in circulation	125,165
Other securities	83,391	Deposits and bills	137,790
Total	281,037	Total	281,037

Ratio of gold to combined deposit and note liabilities.......... 46.8%

Although the above presents a true statement of condition of the Bank of England, it takes no account of the very large amount of currency notes outstanding, which have contributed to inflation as much as if they had been issued by the bank instead of by the government. The currency note account is offset chiefly by government securities and to a small extent by gold and Bank of England notes.

CURRENCY NOTE ACCOUNT AS OF SEPTEMBER 15, 1920

(in thousand pounds sterling)

Gold	28,500	Notes outstanding	354,416
Bank of England notes	18,650	Reserve account	16,859
Government securities	323,975		
Balance at the Bank of England	150		
Total	371,275	Total	371,275

Ratio of the sum of gold and Bank of England notes to currency notes outstanding.......... 13.3%

To get a true picture of the condition of the currency in Great Britain it is necessary to merge the currency note account of the Treasury with the consolidated statement of the two departments of the Bank of England.

Statement of the Bank of England (Issue and Banking Departments) and Currency Note Account of the Treasury Merged as of September 15, 1920
(in thousand pounds sterling)

Gold	151,593	Proprietors' capital	14,553
Securities for uncovered circulation	18,450	Surplus and reserve a/c.	20,388
Government securities	380,078	Bank of England notes, and currency notes	460,931
Other securities	83,391	Deposits	137,640
Total	633,512	Total	633,512

Ratio of gold to combined note and deposit liabilities.......... 25.3%

The merged statement of the currency note account and of the combined departments of the Bank of England is now comparable to the statement of the Bank of France, in which country the government issued no paper money but relied upon the bank of issue for additional amounts of notes.

ii. *Changes in the Bank of England Statement*

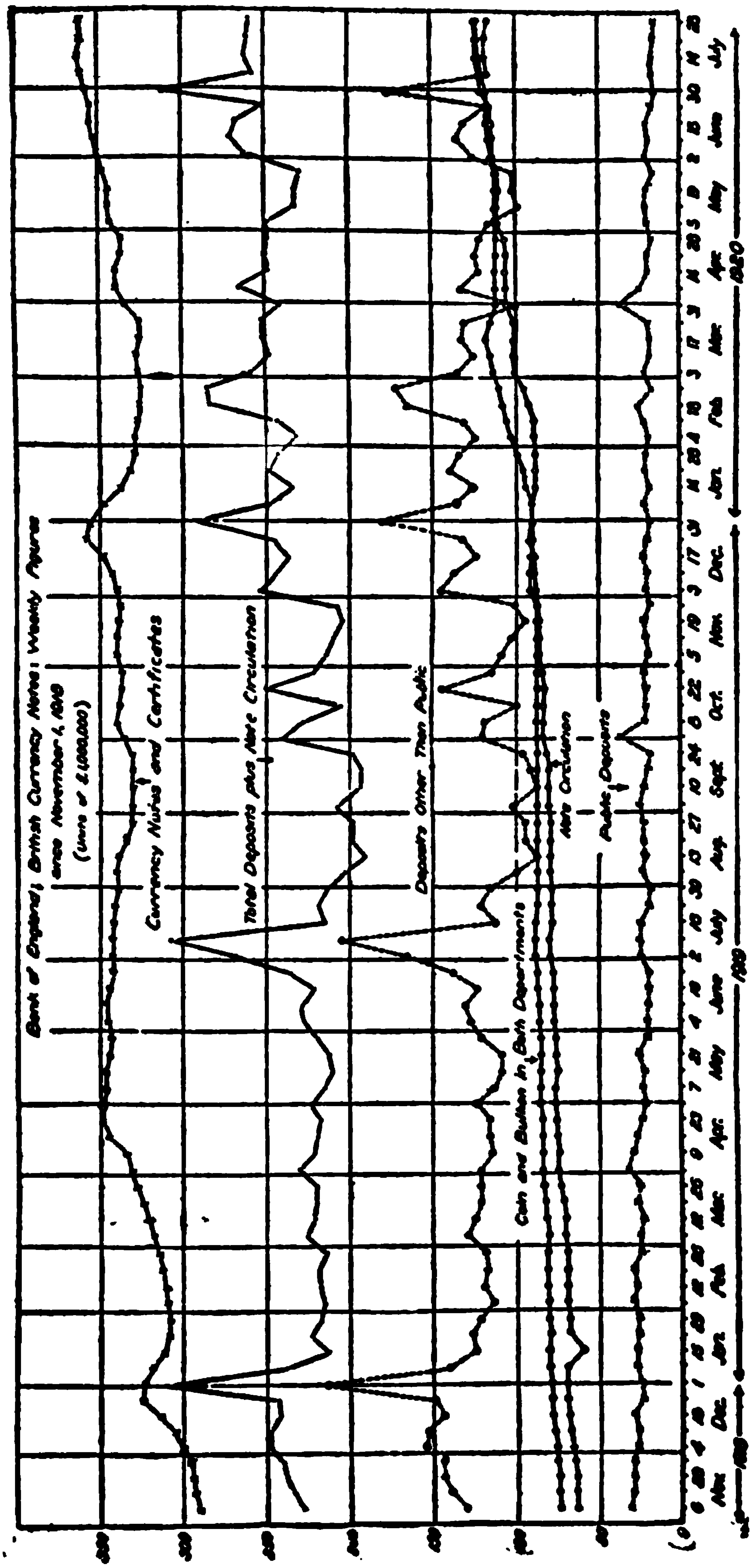
The statements of the Bank of England during the war present clearly the changes in the holdings of gold and of government securities and in the note and deposit liabilities.

Statement of the Bank of England [8]
Issue and Banking Departments Combined
(in million pounds)

Items	Dec. 31, 1913	July 29, 1914	Dec. 30, 1914	Dec. 29, 1915	Dec. 27, 1916	Dec. 26, 1917	Dec. 35, 1918	Dec. 31, 1919	Dec. 29, 1920
Assets									
Gold and silver	35	38	70	52	54	59	79	91	128
Government securities:									
Held by issue dep't	18	18	18	18	18	18	18	18	18
Held by banking dep't	13	11	15	33	57	58	71	93	108
Other securities	52	48	106	112	107	95	93	107	86
Total	119	115	209	215	236	230	261	309	340
Liabilities									
Proprietors' capital	15	15	15	15	15	15	15	15	15
Rest (surplus)	3	3	3	3	3	3	3	3	3
Public deposits	10	13	27	50	52	42	24	19	14
Other deposits	61	54	128	112	127	124	149	181	175
Notes in circulation	30	30	36	35	39	46	70	91	133
Total	119	115	209	215	236	230	261	309	340
Relative Figures									
Gold and silver	100	109	200	148	155	168	226	260	366
Government securities in banking department	100	84	115	254	438	446	546	716	832
Public deposits	100	130	270	500	520	420	240	190	140
Other deposits	100	89	210	184	208	204	244	297	287
Notes in circulation	100	100	120	117	130	153	233	303	443

[8] Weekly returns in London Economist and of Bank of England.

FIGURE V



Bank of England; British Currency Notes: Weekly Figures since November 1, 1918
(units of £1,000,000)
Currency Notes and Certificates
Total Deposits plus Note Circulation
Deposits Other Than Public
Coin and Bullion in Both Departments
Note Circulation
Public Deposits
Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July
1918
1919
1920

FIGURE VI

The amounts in sterling and the relative figures, using the 1913 returns as 100, show an increase in gold in the beginning of the war, and a decline during 1915 and 1916, intermittently, as a result of gold exports to pay for purchases in foreign countries. After the United States entered the war the Bank of England's gold holdings increased, for British purchases were financed not by British gold but by United States government credits. After the armistice the gold holdings increased very greatly because the seas were again safe for the unhindered shipment of the precious metals from the mines. Government securities rose relatively more rapidly than any item on the balance sheet, declining intermittently after the issue of long-term loans which refunded short-term securities as well as ways and means advances and reaching a high point in 1920. The item, "other deposits" rose as public deposits were reduced and distributed through payment by the government of the claims of private companies and persons. Notes in circulation rose practically continuously following the outbreak of the war.

The changes in the condition of the Bank of England are also reflected in the ratio of the various items to the total assets or liabilities. Before the war government securities constituted a very small percentage of the total assets but they increased relatively as government finance displaced the demands of trade. On the other hand, the item "other securities" was the largest asset item in the bank before the war. As a percentage of the total assets it rose, because of the bills discounted without recourse by the Bank of England, but declined thereafter and in both 1919 and 1920 represented a smaller percentage of the total assets than gold. Gold declined from about 33 per cent of the total assets before the war both because of large gold exports during 1915 and 1916 and because of the more rapid increase of other asset items. The lowest ratio of reserves in the banking department was 7.30 per cent on December 30, 1920. After the United States entered the war, and particularly after the armistice, gold became a more important asset and in June, 1920, was the largest of all.

PERCENTAGE OF TOTAL ASSETS OF CERTAIN ITEMS AT DATES SPECIFIED

Items	Dec. 31, 1913	July 29, 1914	Dec. 30, 1914	Dec. 29, 1915	Dec. 27, 1916	Dec. 26, 1917	Dec. 25, 1918	Dec. 31, 1919	Dec. 29, 1920
Gold and silver	29.4	33.1	33.2	24.0	23.0	25.4	30.3	29.4	37.7
Government securities in banking department	11.1	9.6	7.1	15.3	24.2	25.4	27.2	30.1	31.8
Other securities	43.9	41.1	50.9	52.2	45.0	41.3	35.4	34.6	25.8

A table showing the changes in the three important items in the balance sheet of the bank at intervals of four months is given herewith.

GOLD, NOTES AND SECURITIES OF THE BANK OF ENGLAND
(in million pounds sterling)
[Source: London Economist weekly returns; also Federal Reserve Bulletin, Dec., 1917, Oct., 1918, May, 1920]

Date	Gold and silver in issue and banking dep'ts	Bank of England notes in circulation	Total securities in banking department
1914			
July 29	38.0	29.7	58.3
Sept. 30	52.9	35.0	141.6
Dec. 30	69.5	36.1	121.0
1915			
Mar. 31	53.9	35.2	184.6
June 30	52.2	34.6	204.0
Sept. 29	61.5	32.8	163.6
Dec. 29	51.5	35.3	144.9
1916			
Mar. 29	56.7	33.6	121.2
June 28	61.4	35.9	129.5
Sept. 27	53.6	36.5	137.6
Dec. 27	54.3	39.7	163.6
1917			
Mar. 28	54.0	38.3	163.6
June 27	57.5	39.4	145.5
Sept. 26	55.1	41.2	151.8
Dec. 26	58.3	45.9	153.2
1918			
Mar. 27	60.6	47.8	168.3
June 26	65.2	53.7	152.5
Sept. 25	71.5	60.5	154.5
Dec. 25	79.1	70.3	163.2
1919			
Mar. 26	84.3	73.6	136.4
June 25	87.8	78.3	147.6
Sept. 24	88.2	81.6	109.9
Dec. 31	91.3	91.3	199.2
1920			
Mar. 31	112.2	105.3	129.9
June 29	117.9	120.1	193.3
Sept. 29	123.1	127.5	131.2
Dec. 29	128.3	132.8	193.9

The continuous issue by the government itself of paper money with very slight security was a potent cause of inflation. The currency note issue was backed by £28,500,000 gold in June, 1915. This amount has remained constant since, but the amount of notes outstanding has increased eightfold since and as a result the ratio of gold in the redemption account to currency notes outstanding

has declined from a high record of 69.1 per cent in March of 1915 to a low record of 8.3 per cent in June, 1919. Since the latter date the Bank of England notes have been placed in the redemption account in increasing amounts. As these notes are covered by gold to the extent of about 85 per cent they are the equivalent of gold cover for the currency note.

Currency Note Redemption Account
(in million pounds sterling)
[Source: London Economist]

Date	Notes outstanding (a)	Coin and bullion (b)	Bank of England notes (c)	Ratio $\frac{b+c}{a}\%$ (d)	Government securities (e)	Balance at bank of England (f)
1914						
Aug. 25	21.5	.....	.....	.....	.....	11.4
Sept. 30	28.4	4.5	.....	15.8	10.9	9.1
Dec. 30	38.5	18.5	.....	48.1	9.9	9.3
1915						
Mar. 31	39.8	27.5	.....	69.1	8.6	3.5
June 30	46.6	28.5	.....	61.3	9.6	8.7
Sept. 29	72.0	28.5	.....	39.5	20.4	23.0
Dec. 29	103.1	28.5	.....	27.6	54.6	20.5
1916						
Mar. 29	106.7	28.5	.....	26.6	71.1	7.9
June 28	122.1	28.5	.....	23.4	88.2	7.0
Sept. 27	131.5	28.5	.....	21.6	99.3	6.0
Dec. 27	150.1	28.5	.....	19.0	118.1	6.9
1917						
Mar. 28	144.7	28.5	.....	19.7	110.7	6.9
June 27	161.7	28.5	.....	17.6	132.5	5.6
Sept. 26	178.6	28.5	.....	16.0	153.0	5.2
Dec. 26	212.8	28.5	.....	13.4	186.6	5.5
1918						
Mar. 27	228.1	28.5	.....	12.5	202.9	5.8
June 26	252.9	28.5	.....	11.3	229.8	5.3
Sept. 25	275.2	28.5	.....	10.4	253.1	5.1
Dec. 31	323.2	28.5	.....	8.9	305.1	4.6
1919						
Mar. 26	328.1	28.5	.....	8.7	308.6	5.4
June 25	342.3	28.5	.....	8.3	327.3	3.3
Oct. 1	335.0	28.5	1.3	8.9	317.5	3.6
Dec. 31	356.1	28.5	4.0	9.1	337.5	2.8
1920*						
Mar. 31	335.4	28.5	5.9	10.0	313.4	3.0
June 30	357.4	28.5	13.4	11.7	331.7	0.3
Sept. 29	353.8†	28.5	18.7	13.3	332.4	0.4
Dec. 29	367.6†	28.5	19.5	13.0	336.5	0.1

*Maximum fiduciary issue for 1920 fixed at £320,600,300.
†Includes notes called in but not yet canceled.

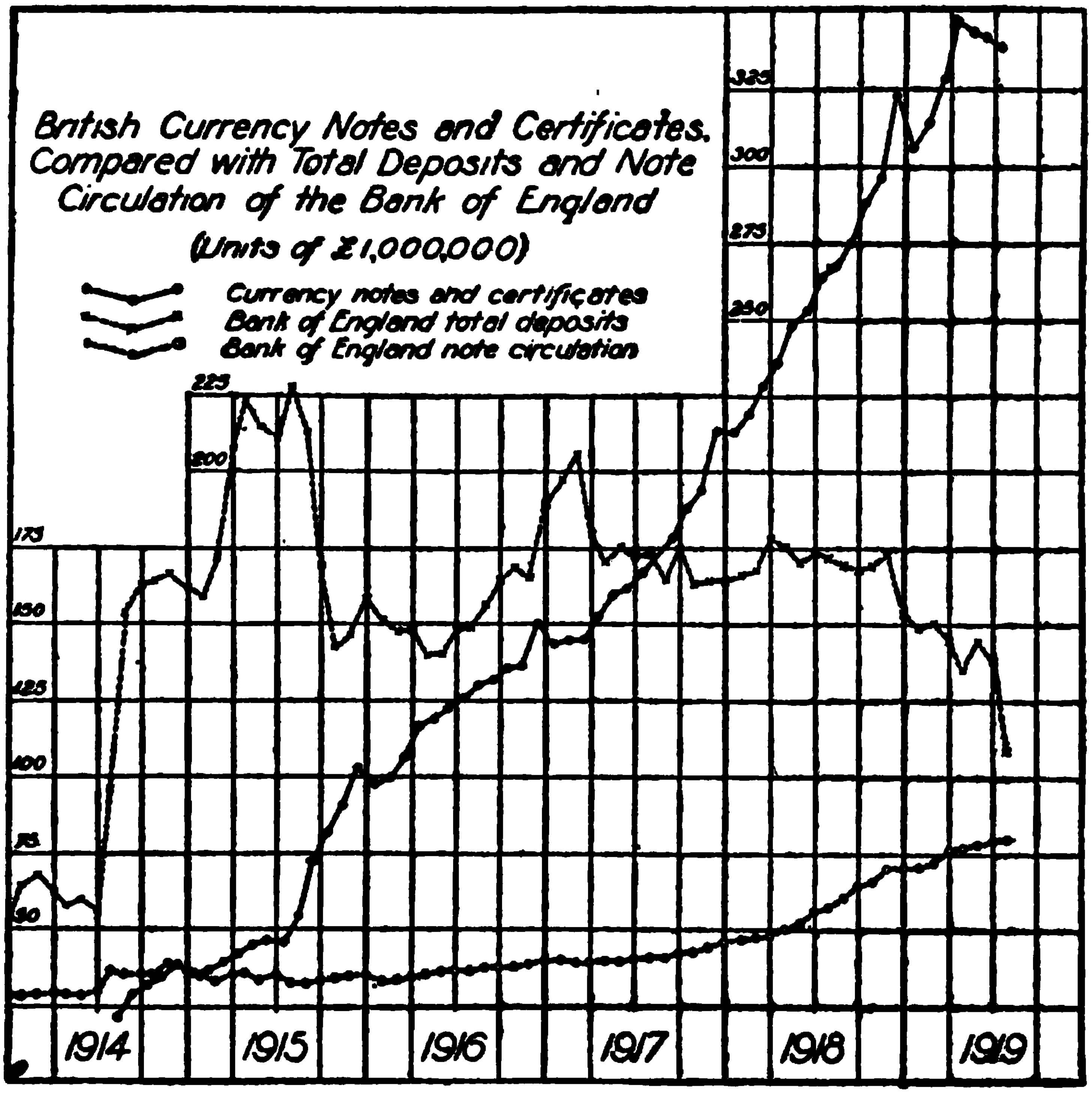


FIGURE VII

D. Effects of Inflation

The increase of deposits in the banking department of the Bank of England and the issue of currency notes inevitably led to inflation. Evidences were not lacking. Prices rose, wage increases followed. Gold bullion sold at a premium in London, and the balance sheets of the joint-stock banks swelled.

i. *Increase of Prices*

The Economist index number of commodity prices increased more than threefold. The peak of prices was reached in March, 1920, and prices declined very rapidly after that date.

Date	Economist index number	Percentage
Average 1901–5	2200	100.0
July, 1914	2565	116.6
December, 1914	2800	127.3
December, 1918	6094	277.0
December, 1919	7364	334.7
March, 1920	8352	379.6
October, 1920	7175	326.1
December, 1920	5924	269.3

The Statist-Sauerbeck index number showed likewise a practically continuous rise in prices until the spring of 1920 and a marked decline thereafter.

Date	Statist index number
Average, 1818–27	111
1873	111
Average, 1880–99	66
Average, 1906–15	82
June, 1914	81.2
December, 1914	91.6
December, 1918	196.0
December, 1919	235.2
April, 1920	266.1
October, 1920	239.9
December, 1920	207.2

The index number of the British Board of Trade showed similar results. The fact that these three British index numbers are based on different commodities explains the slight discrepancies in the relative change between any given dates. The Price Section of the War Industries Board prepared tables of relative prices of identical lists of 150 commodities in the United States and Great Britain. They show a rise in both countries. The United States index lagged behind the British, and as a result of price fixing in the United States did not increase much during 1917 and 1918.

MEDIANS OF RELATIVE PRICES OF IDENTICAL LISTS OF 150 COMMODITIES, IN GREAT BRITAIN AND IN UNITED STATES [9]

(Average prices in year ending June, 1914 = 100)

Period	1913		1914		1915		1916		1917		1918	
	Eng.	U. S.	Eng.	U. S.	Eng.	U. S.	Eng.	U. S.	Eng.	U. S.	Eng.	U. S
Year, total.......	101	101	100	100	128	108	171	148	214	202	242	208
First quarter....	101	101	100	99	112	100	158	133	201	188	239	209
Second quarter..	101	100	99	99	125	103	170	145	212	205	241	207
Third quarter...	101	101	99	100	133	111	169	147	213	206	242	207
Fourth quarter..	100	100	103	100	140	117	186	165	228	207	246	209

ii. *Increase of Wages*

As prices rose wages followed. In some industries, notably in the manufacture of textiles, wage increases were based largely on increases in the cost of living. In the cotton industry at the end of February, 1920, wages were about 2.05 times the pre-war level although wage hours had been reduced about 13 per cent. In the wool industry wages increased about 2.25 times. In the building trades about 2.06 times for bricklayers and 2.61 times for common laborers.

In the engineering and shipbuilding trades, the wages of iron moulders and shipwrights rose to 2.05 times the pre-war wage, and of unskilled labor to 2.80 times. Wages in agriculture rose to about 2.30 times pre-war figures. Clerical salaries about doubled.

iii. *Premium on Gold*

In view of the fact that during the war gold was not used in domestic trade in Great Britain, inflation could not be measured by the discount on paper or the premium on gold, as it was measured in the United States after the Civil War. In foreign trade, however, Great Britain has from time to time permitted the exportation of gold. In maintaining her supply of gold, Great Britain has had to bid for newly mined gold in the international market against the Far East, South America, and the United

[9] Mitchell, *ibid.*, p. 18.

States. The premium on gold is reflected in the price of gold in sterling paper. At mint parity 85 shillings buy 1 ounce of gold. The paper price of gold has gone over 100 shillings per ounce, and has fluctuated with the rate of dollar exchange.[10]

iv. *Increase in Accounts of Private Banks*

As a result of the policy in financing the war, British Government securities became an increasingly important asset of the joint-stock banks. In the consolidated pre-war balance sheet for the five leading banks, the London Joint City and Midland Bank, the London County Westminster and Parr's Bank, Lloyd's Bank, Barclay & Co., and the National Provincial and Union Bank of England, British Government securities constituted about 6 per cent of the total assets on June 30, 1914, whereas on June 30, 1920, they constituted about 16 per cent. On the latter date, the item British Government securities was 7.55 times as large as in the pre-war balance sheet. The increase was practically continuous. The offsetting liability, deposits and current accounts also increased, but to a less extent. Among the assets, bills of exchange declined during the war, but rose from 1918 onward. The increase of this item in the 1915 balance sheet probably resulted from the moratorium, and the subsequent decrease resulted from the restriction of commerce on other than government account. Cash in hand, which includes currency notes and credits at the Bank of England, increased after 1914, and by 1920 had risen to 3.10 times the pre-war figure. In brief, government borrowings caused the manufacture of credit, and the issue of currency notes increased the cash of the joint-stock banks. The paid-in capital and surplus increased as a result of large profits during the period of inflation, but deposits increased more rapidly. The volume of business done per unit of capital increased from 1914 to 1920.

[10] On December 3, 1919, London quoted a price of 106 shillings an ounce, a premium of 19 shillings, or 22 per cent, which likewise measures the premium on New York exchange in London. On December 16, 1920, the London rate for gold was 117s. 6d. and for New York sight bills \$3.50, a premium of 39 per cent on gold and New York bills or a discount of 28 per cent on paper and on London bills.

PRINCIPAL ITEMS OF BALANCE SHEET OF LEADING JOINT STOCK BANKS[11]

(in million pounds)

[Dates are for June 30 of each year]

ASSETS	1914	1915	1916	1917	1918	1919	1920
Cash in hand and with Bank of England	86	165	146	149	198	285	363
British Government securities	38	95	187	182	196	251	284
Bills of exchange	65	89	56	50	173	181	158
Advances	288	303	303	359	357	516	820
Total assets (including items omitted)	632	778	827	876	1107	1639	1761
LIABILITIES							
Capital	28	29	30	30	30	41	57
Reserve	19	20	20	20	23	38	45
Current deposit and other a/c	554	706	740	795	1018	1505	1585
RELATIVE FIGURES							
Cash in hand and with bank	100	195	174	176	234	335	310
Government securities	100	254	497	484	521	667	755
Bills of exchange	100	137	86	77	269	279	244
Advances	100	105	105	125	124	179	285
Total assets	100	123	131	139	174	255	278
Current deposits and other a/c	100	127	133	143	184	272	286

E. POST-WAR POLICY

In January, 1918, the Treasury and the Minister of Reconstruction appointed a committee "to consider the various problems which will arise in connection with currency and the foreign exchanges during the period of reconstruction and to report upon the steps required to bring about the restoration of normal conditions in due course." In his address to the stockholders of the London City and Midland Bank at the end of January, 1918, Sir Edward Holden recommended the consideration of the question of the repeal of the Act of 1844 in order to prevent a repetition of the breaking down of the Act, and the issue of currency notes to take the place of bank notes. Apparently at this suggestion, the Committee on Currency and Foreign Exchanges was subsequently authorized "to consider the working of the Bank Act of 1844 and the constitution and functions of the Bank of England with a view to recommend-

[11] Based on returns of the banks, and on the London Economist. See Federal Reserve Bulletin, October, 1920, p. 1044, and April, 1920, p. 374. For methods of increasing cash reserves and the influence of the war loan see Industry and Finance, A. W. Kirkaldy, pp. 220, 223, 226, 230.

ing any alterations which may appear to them to be necessary or desirable." [12]

i. *Efficacy of Bank Act Before the War*

The committee report points out how the Bank Act of 1844 maintained an effective gold standard before the war. When exchange was favorable, gold would be imported, and legal tender bank notes outstanding would be increased to meet the demands of trade. As prices rose, exports would decline and imports increase. As exchange became adverse, gold would be exported and the ratio of reserves to liabilities of the Bank of England reduced. If it became necessary to remedy the situation, the bank would raise the rate of discount and would thus retain gold within the country and might even attract gold from other countries. Simultaneously credit would be restricted, goods carried on borrowed funds forced on the market, and prices depressed. As a result imports would be checked, exports stimulated and the adverse trade balance corrected. Gold would again flow into the country, thus completing the cycle. This automatic machinery adjusted British trade and prices to world conditions.

ii. *The Breakdown of the Bank Act During the War*

As explained in detail above, the Bank Act was suspended, at the outbreak of the war, bank notes were no longer convertible into gold upon demand, and the unlimited issue of currency notes was authorized. Therefore the extent of the depreciation of paper was not determinable, in domestic transactions at least. Theoretically the currency note remains convertible into gold. But gold exports to correct the exchanges, if permitted, would soon exhaust the gold reserve. The depreciation of the exchanges is due to the creation of deposit credit against huge volumes of government securities, and against commercial bills of importers in the financially weak countries of Europe, which cannot be liquidated within the usual trade term. Under conditions of depreciated paper and inconvertibility into gold the international position of London in

[12] First Interim Report of the Committee on Currency and Foreign Exchanges After the War, August, 1918.
Final Report, December, 1919, and Treasury Minute.
H. M. Stationery Office, 1918, 1919. Reprinted in British Board of Trade Journal and Federal Reserve Bulletin.

trade and finance is jeopardized. The restoration of an effective gold standard is essential.

iii. *The Prerequisites for the Restoration of the Gold Standard*

Credit may be deflated by funding the floating debt through popular subscription, by limiting public expenditures, and by increasing production. The liquidation of bank loans will reduce the offsetting deposits. The reduction of government securities held by the banks and their absorption by the public, by payments against their deposit accounts will have a similar effect. The payment of taxes (by checks) will reduce aggregate deposits and will make it possible to reduce or cancel the government short-term debt.[18]

(a) *Cessation of Government Borrowing*—

Ways and means advances, or borrowings by the government from the Bank of England, were authorized by Parliament and intended to be a means of providing funds not for long periods, but for temporary needs, to anticipate assured revenue or contemplated permanent borrowing. The government must not only cease to borrow further through Ways and Means advances, but it must repay those outstanding, either by taxation or by means of public subscription to long-term government loans. Drummond Fraser has proposed the use of continuous day-to-day borrowing, or the sale of bonds by the same methods as war saving certificates, as he holds that the need for reducing not only ways and means advances, but also the floating and maturing debt puts too great a strain on the taxable capacity of the country.

Whether loans or taxes be resorted to, payment by check will reduce the credit balance of the depositor and thus the aggregate deposit of the joint-stock banks and their balance at the Bank of England. The Bank of England deposits will be decreased when the government securities it holds are retired.

(b) *The Utilization of the Discount Rate*—

During the war interest rates were kept low to facilitate government financing. To attract foreign funds while a low rate

[18] Address of H. A. Gibson, before the Economic Section of the British Association, August 26, 1920.

prevailed, a differential rate was established in their favor. The Bank of England paid a higher rate on its foreign funds borrowed than it received on its funds loaned at home. The bank rate changes during the war were as follows:

BANK RATE CHANGES [14]

Date of change	Rate per cent	Duration in days
1914		
January 8	4½	
January 22	4	14
January 29	3	7
July 30	4	182
July 31	8	1
August 1	10	1
August 6	6	5
August 8	5	2
1916		
July 13	6	705
1917		
January 18	5½	189
April 5	5	77
1919		
November 6	6	945
1920		
April 15	7	161
1921		
April 28	6½	378

On June 19, 1917, the bank paid 4 per cent on deposits at three days' notice, of clearing-house banks, and on February 14, 1918, reduced the rate to 3 per cent. However, on deposits made with it by joint-stock banks of money representing foreign balances on deposit with the latter, the Bank of England maintained a rate of 4½ per cent from November 15, 1917, until August 29, 1919.

The rate paid by the joint-stock banks on deposits is 1½ per cent below the discount rate of the Bank of England. In November, 1919, the discount rate of the Bank of England was raised from 5 per cent to 6 per cent, and on April 15, 1920, the rate was further raised from 6 per cent to 7 per cent. The aim was to deflate credit and to reduce prices as well as to improve the exchange position of sterling, in view of the fact that Belgian and other bank rates had advanced. There are two schools of bankers, who

[14] Kirkaldy, Industry and Finance, p. 215; also Stock Exchange Official Intelligence, 1919, p. 1745, and London Economist at above dates.

take opposite views on the raise of the rate. One group holds that the embargo on gold exportation makes an increase in the discount rate unnecessary. These bankers regard the needs of industry for funds as a primary consideration and favor the existing embargo on gold exports, the removal of the restrictions on the issue of capital for domestic enterprise, and the maintenance of a low bank rate. They hold that the raising of the bank rate retards industrial recovery, that deflation does not lower prices, and that prices will fall when production exceeds consumption or supply exceeds demand.

The other bankers favor a high rate and advocate the removal of restrictions on gold exports. They hold that the raising of the bank rate to 10 per cent, if necessary, would check gold exports, speculation, and the production of nonessential goods, restrict capital to enterprises for whose output there is a demand, force the sale of goods bought on credit, and thus compel deflation and the reduction of the price level. This group also advocates a high rate on government borrowing to discourage government expenditure, treasury bills having enjoyed a preferential rate ½ per cent under the bank rate. The division of opinion rests on the question of the advisability of slow or rapid deflation, of a mild or drastic means to restore an effective discount rate.[15]

(c) *Limitation of the Fiduciary Issue*—

The Committee on Currency and Foreign Exchange recommends that the issue of fiduciary currency be limited and that the arrangements be terminated under which deposits at the Bank of England may be exchanged for legal tender currency without affecting the reserve ratio. It also suggests that the note issue should be entirely in the hands of the Bank of England. In the final report the committee recommends that the actual maximum fiduciary circulation in any year should become the legal maximum of the following year. A treasury minute gives effect to this recommendation by directing the Bank of England to restrict the issue of currency notes during 1920 to £320,600,000, except against gold or Bank of England notes. The committee further recommends that there

[15] Bank Letter of Samuel Montague & Co., April 5, 1920. London Economist, April 5, 1920. Report of H. G. Grady, U. S. Trade Commissioner at London, dated May 5, 1919, printed in Commerce Reports, June 6, 1919.

should not be any early resumption of the internal circulation of gold coin, that the gold reserves now held by the banks should be centralized and transferred to the Bank of England, and that a normal minimum of £150 million should be accumulated as a central gold reserve. Until such a reserve has been built up and maintained with a satisfactory foreign exchange position for at least a year the government should reduce the uncovered note issues. When the latter has been reduced to an amount consistent with the maintenance of a central gold reserve of £150 million, the outstanding currency notes should be retired and replaced by Bank of England notes of similar low denomination. However, until such a point has been reached, the committee does not recommend the transfer of the currency note issue to the Bank of England, but prefers that it remain a government issue. Should any new notes be required they should be issued not against government securities, as was the case during the war, but against Bank of England notes, which are of too large a denomination for general circulation. If Bank of England notes are used as cover for additional currency notes, the demands for new currency would then fall in a normal way on the banking department of the Bank of England and affect again, as before the war, the ratio of reserves to liabilities.

iv. *Maintenance of the Bank Charter Act of 1844*

Criticism of the Act of 1844 dates back to three years after its enactment when the first of the panics which it was to have prevented occurred. The Act was intended to do three things (1) to curtail the issue of notes by private bankers and the joint-stock banks, (2) to limit the issue of notes by the Bank of England, (3) to check speculation. Until 1826, the Bank of England was the only joint-stock bank. Many of the joint-stock banks established later had a doubtful reputation in contrast to the private bankers, whose notes, issued without legal restrictions as to cover or total amount, were fully accepted by the local public having personal knowledge of the banker.

Speculation through the overissue of notes caused runs on the banks and failures. Sir Robert Peel expected that the Bank Act would cure this evil, and that above a certain fixed limit, dependent upon the amount of notes then outstanding and necessary, notes would be issued only against gold cover. He expected that as gold

was paid out for notes, confidence would be restored. At the time the Act was passed deposit banking was not extensive and inflation then existing had been the result of the overissue of notes. Since then, credit banking has developed, and subsequently a point that Peel had overlooked has become quite evident, namely, that deposits were likewise payable in gold and credit inflation might result in a stringency. The issue of notes bears no relation to the demand of business—to the amount of commercial bills. Under the Act, if gold is not deposited in the issue department notes cannot be had, no matter how much they are needed. An extraordinary demand for bank notes in times of expanding business falls on the reserves in the banking department, the depletion of which precipitates a crisis.

Such crises did occur in 1847, 1857, 1866, 1878 and subsequently. In the three years first mentioned the Act was broken and notes issued without limit. Royal Commissions twice investigated the failure of the Act but no positive recommendation was adopted. The only remedy was the toleration of the suspension of the Act. Viscount Goschen in 1891 advocated a plan to issue notes upon reserve consisting of four-fifths gold and one-fifth securities, and to withdraw gold from the public into the reserves of the bank, and proposed at the same time that the bank be authorized in times of emergency to issue additional notes against securities upon the payment of a rate of interest sufficiently high to retire the excess circulation when it was no longer needed. The Reichsbank operates on this principle, which was incorporated in our Federal Reserve System.[16]

Sir Edward Holden in his address to the stockholders of the London City and Midland Bank in 1918[17] discussed the weakness of the Bank Act, and made a number of recommendations. These were strongly endorsed by a committee on Banking, Currency and Foreign Exchange of the London Chamber of Commerce, which in 1919 dissented from the report of the official committee appointed by the Treasury. Sir Edward Holden recommended that the two departments, issue and banking, be consolidated; that notes be issued not against gold but against both gold and bills of exchange so that the note issue might fluctuate with the demands of trade; that the note issue bear a fixed relation to gold or the cash balance;

[16] Conant, 5th Edition, pp. 134-135.
[17] Printed as a Supplement to the Statist, February 2, 1918.

that the fixed ratio of gold to notes be lowered when necessary on the payment of a tax; and that the notes should not exceed three times the gold or cash balance. Many bankers in England believe that if these recommendations, which are substantially the principles on which the central banks of issue of other countries are based, had been in effect before the war, the declaration of the moratorium in 1914 would have been unnecessary.

Nevertheless the Treasury Committee on Currency and Foreign Exchanges recommended that the separation of the issue and banking departments of the Bank of England should be maintained, and that there should be a fixed fiduciary issue, beyond which notes should be issued only in exchange for gold. In its final report, the Committee repeated its recommendation and added that it had considered the principles governing the banking system of the principal foreign countries and was satisfied that they were not so well adapted to the needs of England as the Act of 1844. Undoubtedly the defense of the Act by the Committee is the weakest and most vulnerable part of its report.

CHAPTER VII[1]

FRENCH CURRENCY AND CREDIT

A. The History of French Banking

i. *Development of the Bank of France*

In order better to understand the effect of the war on French credit and currency it will be helpful to review briefly the development and organization of the Bank of France. The success of the Bank of England led to the establishment of the *Caisse de Commerce d'Escompte du Commerce* on March 24, 1776, under the historic ministry of Turgot, but as a result of the vicissitudes of the French Revolution the bank lost its standing and was suppressed on August 24, 1793, by decree of the National Convention.[2] On January 18, 1800, Napoleon created the Bank of France, a bank of issue and of discount, with a capital of fr. 30 million. Three years later the bank was endowed with the exclusive right of note issue and the establishment of additional banks in the departments of France was prohibited. The fall of Napoleon was followed by the creation of banks throughout the several departments with the right to issue notes, and aiming to meet local needs. They were officered by local bankers. These banks grew in number, particularly in the fourth decade of the century, and served local industries in a way in which the Bank of France did not, for it was regarded as a bankers' bank, a bank of rediscount. The details

[1] For collateral reading, see in addition to sources given under the chapter on French Public Finance—

Bank of France Reports, Banque de France, Compte Rendu, Assemblée Generale des Actionnaires, 1914–1920. Paris: Paul Dupont.

Supplement to Commerce Reports, 7B, Reports of Consul General A. M. Thackara, September 20, 1920.

Also Conant, History of Modern Banks of Issue.

Laughlin, Credit of the Nations.

Anderson, Effects of War on Money, Credit and Banking in France.

Bogart, Direct and Indirect Costs of the World War.

[2] Conant, Courtois, Macleod and others.

of the struggle between the local banks and the Bank of France, which wished to establish branches in the departments, are of interest chiefly in connection with the peculiar and undesirable centralization of banking in France before the World War.

In 1848 an official decree provided for the fusion of the banks in the several departments with the Bank of France, and gave it the exclusive right to issue notes. This provision resulted from the lack of interchangeability of the note issues of the banks in the several departments and from the absence of clearing arrangements such as existed in other countries for the return of notes to the issuing bank. The total circulation of the Bank of France was made equivalent to the sum of the issues of the banks fused with it. The bank charter was renewed several times under conditions imposed by the government, such as the requirement of the establishment of branches within fixed periods of time in all the departments of France. The last charter was renewed on December 20, 1918, and the bank's privilege to issue notes was extended for 25 years from January 1, 1921, subject to greater participation by the government in profits of the bank and to provisions for the retirement of the excessive note issues. The new charter also provides for progressive taxes on the circulation and for the payment by the bank to the government of any excess dividend above 24 per cent. Both these funds are to be applied to the industrial rehabilitation of the country.

History affords a precedent for the activities of the Bank of France during the World War. During the Franco-Prussian War the bank suspended specie payment and issued inconvertible notes which were made legal tender. The bank made advances to the government of fr. 50 million, secured by treasury bills, and total advances during the war amounting to fr. 1470 million.

ii. *Organization and Functions of the Bank of France*

(a) *Ownership and Control—*

The Bank of France is privately owned but is controlled by the government. Since 1806 the state has had the right to appoint the governor and two deputy governors, who are subject to removal by the Minister of Finance. The general control is vested in the governing board of the bank, which consists of 15 regents and three auditors. Its members are elected at a general meeting of

the stockholders, but three of the 15 regents must be selected from among the disbursing agents of the Treasury and five regents and the three auditors must be chosen from among the stockholders. Only 200 stockholders, those holding the largest number of shares, are permitted to participate in the annual meetings. A full statement of the operations is furnished by the bank to the government every six months and a weekly balance sheet is published in the *Journal Officiel* every Friday. The governor and the deputy governor are responsible for the important measures taken by the bank, such as changes in the discount rate.

The bank receives public monies on deposit and performs every public service free of charge, such as paying coupons on the public debt and issuing new loans. However, the bank does not act as an agent of the state. It is primarily a bank of issue. Its notes outstanding represent the largest part of its liabilities. The rediscounts are relatively small.

(b) *Rate of Discount*—

Because, unlike the Bank of England, it was not before the war so extensively a bank for trade, its discount rate was less sensitive to changes in international conditions. The French bank rate changed fewer times than did the English. The reasons are not far to seek. Primarily the large gold reserve and the reluctance of the Bank of France to part with its gold made it unnecessary to change the rate of discount to influence the gold supply. The Bank of England operated on a smaller gold basis, and permitted the free flow of gold in and out, and therefore had to rely more heavily upon a sensitive bank rate to regulate its gold supply and business conditions in general. The Bank of France experienced to a less degree the fluctuating demands of foreign trade or the effects of the rediscounts of the joint-stock banks. Again, the English banks had larger deposits, whereas the French banks have a relatively larger note circulation. The Bank of England had a lower gold reserve and was strictly limited in its power to issue notes. The Bank of France had very large gold reserves and had unlimited power of note issue. Furthermore, the British relied exclusively upon the discount rate to regulate their gold supply, whereas the Bank of France preferred to buy gold at a loss rather than to increase the discount rate. Again, as the French discount rate rose the government received a progressively increasing share

of the profits, and therefore it was to the interest of the bank to keep a low rate of discount.[3] The bank might issue notes only against cash or legal loans and discounts, so that every note was covered either by cash or assets.

(c) *Private Banks*—

Corresponding to the joint-stock banks of England the French private banks serve the needs of commerce. These discount commercial bills and accept bills drawn upon them. Bills acceptable for rediscount at the Bank of France are subject to a maximum rate which is the equivalent of the official rate of the Bank of France. This covers commercial bills but not loans on securities. Advances are made against securities as collateral at a slightly higher rate than against commercial paper. The Bank of France rediscounts the paper of the private banks and therefore the latter need carry but small cash reserves. The private banks in addition do an investment business. They make advances on securities and also sell them to the public.

(d) *Notes vs. Deposit Credit*—

The Bank of France relied largely upon notes rather than upon deposits in the making of loans, because the system of payment by check and of clearing houses was not developed in France as it was in Great Britain and in the United States. However, the Bank of France also did a large business in transferring credits between individuals, similar to the *Giro Verkehr* in Germany. A private bank will effect these transfers between branches within a city but the services of the Bank of France are utilized for making transfers between distant points. Again, acceptances are also media of credit and to some extent lessen the reliance upon the use of notes. This reliance upon notes rather than upon deposits explains the war-time phenomena affecting the Bank of France.

(e) *Foreign Investments*—

Several other aspects of French banking are relevant to the financial changes resulting during the war. In the United States deposits grow out of loans; a business man desiring to expand is debited with the amount of his loan and credited correspondingly

[3] Conant, 5th Edition, Chapter III.

with a deposit. In France deposits accumulate in the banks in excess of the demands of industry. As a result the surplus deposits seek investment and are used to a large extent in foreign fields.

Another factor which led to investment abroad was the centralization of French banking. The struggle between the local banks in the several departments and the Bank of France or the few large credit institutions finally resulted in the concentration of banking facilities. During the decade around 1840 when the decentralized departmental banks developed greatly, industry became very active. However, in the generation before the war, large funds accumulated in France were not devoted to the development of local industry; this would have required widely scattered banks, staffed by local men familiar with the local industrial needs. The centralization of funds in a few institutions made inevitable their investment in bonds of foreign countries, because of the greater ease in following the annual budget of a few governments rather than the continually changing balance sheets of many industrial companies. This financial peculiarity had grave political defects. To safeguard her funds France had to interest herself unduly in the welfare and stability of her debtors. Her financial interests were subservient to political policy. Until January 1, 1921, the French treasury paid interest in default on bonds guaranteed by the Russian Imperial Government. In 1906 and 1911 France by threatening to withdraw her loans to Germany was able effectively to influence German military policy in Morocco.

The evils of this situation have been pointed out time and again.[4] M. Ribot, in an address before the Chamber of Deputies on May 17, 1915, said, "A great nation does not live on interest and dividends from foreign securities. It lives on labor and industry. The extent of foreign investment is a deceptive measure of a nation's riches. Not an abundance of capital, which it can export, but a support of enterprise which develops the means of production, is the measure of a country's riches." The incentive to invest abroad was the payment of high commissions to the bankers on poor securities, issued by second-rate governments and sold to the thrifty French peasant at a low rate of interest which simulated safety. On some issues the underwriters' margin ran as high as 18 per cent. It was not unusual for the French bankers

[4] Herriot, Boret, Lysis, and others, cited in my "Labor and Reconstruction in Europe," pp. 35-40.

to charge from 7 to 10 per cent, in contrast to 2 to 3 per cent charged in New York.[5] As we shall see in the section on foreign exchange the great bulk of French investments were in Russia, Turkey, Bulgaria, and Mexico, a group distinguished for industrial imprudence, financial ineptitude, and political instability. The outbreak of the war made it impossible to realize on these securities and to use them, as had been expected, as an emergency reserve in case of war. French credit was hurt as the result of the Balkan War and at the outbreak of the World War, the collapse of her foreign investments aggravated an already weak fiscal position resulting from an increase of expenses, a rising debt and the lack of an expansible system of direct taxation. All these factors combined made it inevitable that the financial reliance of France during the war should have to be on the issue of short-term loans and on the printing of paper money.

B. War-time Financial Legislation

i. *The Moratorium* [6]

The rumors of war in the middle of 1914 led to a rapid decline in prices on the Paris Stock Exchange; in some cases a fall as much as 40 per cent. Securities became unsalable and stock exchange loans involved amounts of about 800 million francs, on both the main exchange and the curb, the *Parquet* and the *Coulisse*. The freezing of stock exchange loans made it impossible to meet maturing obligations. On July 29, 1914, the first moratorium was decreed affecting loans dated prior to August 1, 1914, and maturing before August 15. Then, three days later the moratorium was extended to bank deposits which could be drawn upon only to the extent of 250 francs and of 5 per cent of the balance. Withdrawals for the payment of wages were exempted from this provision. Withdrawals of deposits from savings banks were limited to 50 francs per fortnight per depositor. On August 9,

[5] National Monetary Commission, Doc. 405, pp. 232 *et seq.*

[6] Le Prorogation des Echéances, Economiste Français, January 11, March 29 and April 12, 1919, pp. 44-47, 396, 459.

Journal Officiel, December 30, 1918, March 26 and April 1, 1919.

Bourbeau, Marcel, La Bourse des Valeurs de Paris Pendant la Guerre. Paris, Librairie Générale de Droit et de Jurisprudence, 1921. Part I.

1914, an additional moratorium was declared on all negotiable instruments, checks, bills of exchange, notes and warrants, due between August 1, 1914, and September 1, 1914. Negotiable instruments drawn on the Treasury were exempt. On August 29, 1914, a moratorium was declared on obligations of the departments of France and of the communes. There was a provisional moratorium on payments arising from the sale and purchase prior to August 4, of rentes, public securities and other transferable instruments, as well as the loans for carrying them forward. However, the postponed payments bore interest at the rate of 5 per cent per annum. The moratorium also covered insurance contracts and the installments payable under subscriptions to the 3½ per cent loan issued before the war began. A moratorium on house rents was also granted. The moratorium was extended by periods of 30 days up to November 1, by successive periods of 60 days up to May 1, 1915, and thereafter by successive periods of 90 days.

In January, 1915, several banks lifted the moratorium on deposits. In October, 1915, the Bourse moratorium lapsed and settlements were effected without difficulty. The moratorium did not apply to government contractors after December 23, 1915, and other beneficiaries of the war after September 29, 1916. The general moratorium was lifted after December 29, 1918, for the rest of the population, except for those mobilized or living in the devastated areas. The moratorium on payment of interest and dividends, amortization and principal of debts of the departments and communes was lifted April 1, 1920.[7] After December 16, 1916, no postponement was permitted unless for good cause. On December 27, 1920, a decree was enacted terminating the moratorium eighty months after July 31, 1914.[8] The amount of bills, matured and extended, reached a maximum of fr. 4476 million in October, 1914, and declined continuously to about fr. 500 million in June, 1920.

There are few students of finance who justify the wholesale use of the moratorium in France. In view of the rediscount facilities of the Bank of France, which its governors did not hesitate to employ freely and in further view of the right of unlimited

[7] Journal Officiel, February 10, 1920.
[8] Economiste Français, January 1, 1921, p. 9. Journal Officiel, December 29, 1920.

issue of banknotes, the moratorium on deposits or even on commercial paper cannot be defended. The moratorium was a confession of fear on the part of the bankers, an incentive to hoarding on the part of the public, and a damper on the prosecution of the war. The use of notes as a means of payment induced the moratorium more than would a system of payment by checks.

ii. *Suspension of Specie Payment and the Issue of Legal Tender Notes*

As a measure to supplement the moratorium, specie payments were suspended on August 5, 1914, in conformity with the precedent of the Franco-Prussian War. The bank was released from its obligation to redeem its notes in specie. At the same time the irredeemable notes were made legal tender. The Bank of France was not limited in the issue of notes other than by the flexible maximum authorized by the state, and therefore was not under the necessity, like the Bank of England, of suspending its Bank Act, or like the Reichsbank, of redefining the terms, cash and commercial paper, upon which its notes were based. The closing of the stock exchange and the general moratorium made inevitable the suspension of specie payments.

C. War Operations of the Bank of France

i. *Changes in the Statement of the Bank of France*

The effects of the war were clearly reflected in the changes in the several items of the Bank of France.[9]

The total metallic reserve in France declined slowly, from fr. 4157 million at the outbreak of the war to fr. 3850 million in the middle of 1920. The total metallic reserve at home and abroad increased considerably, from fr. 4157 million at the outbreak of the war to fr. 5828 million in the middle of 1920; about fr. 1950 million of gold was sent to England as security for loans. Total government securities increased phenomenally in the same period, from about fr. 418 million to fr. 30,266 million. Loans and

[9] Economiste Français, 1919, xlvii: 1, pp. 206, 267, 297, and 1920, xlviii: 1, pp. 393, 423, 457, 489, covering operations during 1918 and 1919.
Les Opérations de la Banque de France pendant l'Année, 1920, Bulletin de Statistique et de Législation Comparée, Feb., 1921, pp. 232–246.

STATEMENTS OF THE BANK OF FRANCE[16]
(In million francs)

ASSETS	Dec. 26, 1913	July 30, 1914	†Dec. 10, 1914	Dec. 30, 1915	Dec. 28, 1916	Dec. 27, 1917	Dec. 26, 1918	Dec. 26, 1919	June 24, 1920	Dec. 30, 1920
Gold in vault	3517	4141	4141	5,015	3,383	3,314	3,440	3,600	3,609	3,552
Other metallic reserve	640	625	351	352	295	247	318	268	241	266
Total domestic reserve	4157	4766	4493	5,367	3,678	3,562	3,758	3,868	3,850	3,818
Gold held abroad	....	....	....	....	1,693	2,037	2,037	1,978	1,978	1,949
	4157	4766	4493	5,367	5,371	5,599	5,795	5,846	5,828	5,767
	....	....	....	1,057	826	778	2,357	1,297	860	678
	300	300	300	300	300	300	300	300	300	300
	....	....	3600	5,000	7,400	12,500	17,150	25,500	26,000	26,600
	....	....	....	630	1,800	3,220	3,526	3,755	3,865	3,980
	118	118	....	114	112	113	115	113	101	115
urities	418	418	3900	6,044	9,612	16,133	21,089	29,668	30,266	30,995
	1527	2444	213	429	619	918	1,052	1,287	1,787	3,311
	....	....	3637‡	1,834	1,339	1,141	1,029	677	523	404
securities, etc.	772	759	780§	1,152	1,318	1,225	1,216	1,464	1,361	2,702
	44	48	....	50	46	48	46	47	47	46
	320	352	....	363	503	628	1,550	1,927	2,038	1,579
Total	7238	8787	....	16,296	19,634	26,468	34,114	42,162	43,210	44,982
LIABILITIES										
	182	182	182	182	182	182	182	182	182	182
	42	42	....	43	43	43	43	43	43	55
	2	5	....	22	25	26	3	5	5	29
	403	383	276	274	15	252	112	77	75	57
	573	951	2671	2,114	2,260	2,913	2,366	3,127	3,578	3,518
	5714	6683	9986	13,310	16,679	22,337	30,250	37,274	37,544	37,902
	320	541	....	457	430	714	1,156	1,454	1,783	3,239
Total	7238	8787	....	16,296	19,634	26,468	34,114	42,162	43,210	44,982

it end of 1914. Incomplete data for Dec. 10, 1914, taken [illegible] the report made by
financial situation of France.
year 1919. § Advances on securities only.

Figure VIII

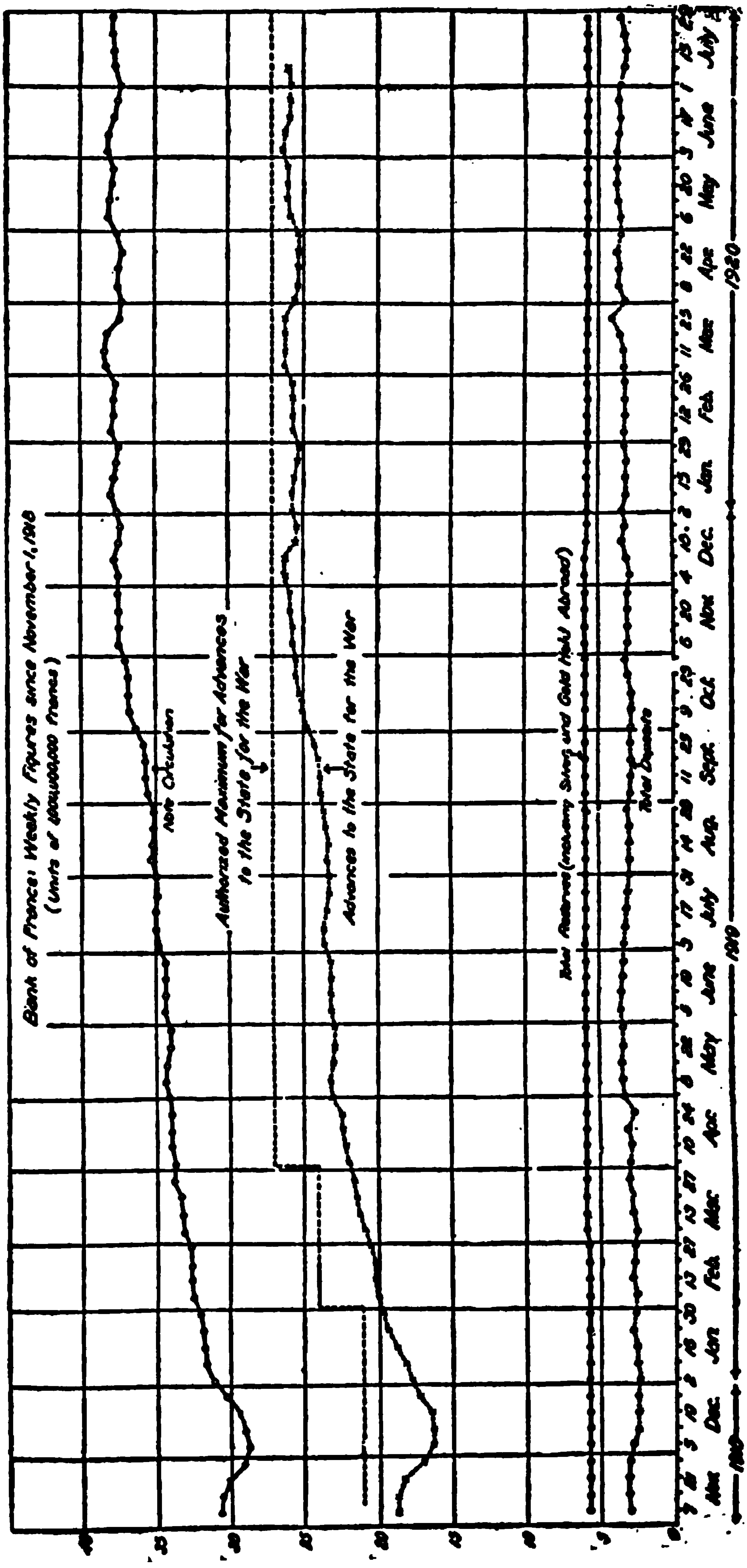

Bank of France: Weekly Figures since November 1, 1918
Note Circulation
Authorized Maximum for Advances to the State for the War
Advances to the State for the War
Total Reserves (including Silver and Gold Held Abroad)
Total Deposits
1919
1920

FIGURE IX

discounts, representing the needs of commerce, declined very sharply after the outbreak of the war, from fr. 2444 million to fr. 213 million toward the end of 1914, and rose only slowly during the war, but by the middle of 1920 almost equaled the pre-war level. Bills matured and extended, the item which reflects the moratorium, reached their highest figure in 1914 and declined continuously thereafter; on December 10, 1914, this item amounted to fr. 3637 million and on June 24, 1920, to only fr. 523 million. Government deposits declined continuously after the outbreak of the war, but the item, "other deposits," rose and reflected the inflation. Just before the outbreak of the war "other deposits" amounted to fr. 951 million, at the end of 1914 amounted to fr. 2671 million, ranged from about fr. 2200 to fr. 2900 million during 1917, but rose considerably above these figures from 1918 to 1920. Bank notes in circulation rose continuously from about fr. 6683 million in 1914 to fr. 37,544 million in the middle of 1920.

The changes in the leading items of the statement of the Bank of France may be more clearly stated if the figures are shown relatively, using 1913 returns as 100:

PRINCIPAL ITEMS OF THE BANK OF FRANCE IN RELATIVE FIGURES

(Dates as given in previous table)

Items	1913	1914, July	1914, Dec.	1915	1916	1917	1918	1919	1920, June 24
Metallic reserves at home..	100	115	108	129	89	86	90	94	93
Metallic reserves at home and abroad.............	100	115	108	129	129	135	139	141	140
Total government securities.	100	100	932	1445	2300	3860	5040	7190	7240
Other deposits...........	100	164	465	368	393	506	411	508	622
Bank notes..............	100	117	175	233	292	391	530	614	658

The total metallic reserve in vaults of the Bank of France rose by the end of 1915 intermittently to 1.29 times the 1913 level but declined by the end of 1916 to 0.89 times the 1913 level, and thereafter through 1920 did not regain the pre-war level. However, the total metallic reserve at home and abroad rose fairly continuously throughout the war and in July, 1919, attained a level 1.41 times the pre-war figure. Total government securities rose continuously. These consisted chiefly of advances to the government and to a less extent of treasury bills discounted, that

is advances to foreign governments. In relative figures, the total government securities at the end of 1918 when hostilities ceased, if one omits the constant item, other government securities was 70 times the pre-war figure but by June 24, 1920, had risen sharply to 101 times the 1913 figure. Other deposits rose intermittently but considerably, and by the middle of 1920 were 6 times the pre-war level. Bank notes, on the other hand, rose continuously, and after the signing of the armistice were 5.30 times the pre-war figure, and by June, 1920, had risen further to 6.58 times the 1913 figure.

RATIO OF PRINCIPAL ITEMS TO TOTAL ASSETS OR LIABILITIES, IN PER CENT

(Dates as given in previous table)

Items	1913	1914, July	1915	1916	1917	1918	1919	1920
ASSETS								
Total domestic reserves	57	54	33	19	13	11	10	9
Total government securities	4	5	37	49	61	62	69	70
LIABILITIES								
Other deposits	8	11	13	11	11	7	7	8
Bank notes	79	76	82	85	84	89	89	87
RATIO OF METALLIC RESERVE TO LIABILITIES								
Ratio metallic reserve at home to notes	73	71	39	23	16	12	11	10
Ratio metallic reserves at home to notes and deposit liabilities combined from last statement in June of each year	60	64	30	27	16	11	10	9

The varying fluctuations in the principal items in the statement of the Bank of France have greatly altered their relative importance. For instance domestic metallic reserves constituted 57 per cent of the total assets at the end of 1913 and declined continuously to 9 per cent of total assets in the middle of 1920. On the other hand total government securities, which at the end of 1913 constituted only 4 per cent of the total assets, rose continuously to 70 per cent by the middle of 1920. Since the Bank of France is principally a bank of issue the bank notes were always an important item before the war. At the end of 1913 they constituted 79 per cent of the total liabilities, but in the huge inflation which followed bank notes came to constitute 89 per cent of the liabilities in the middle of 1918. The Bank of France was noted for the very high percentage of gold to notes. Before the war

this ratio was 73 per cent. Since the gold abroad is held as security for large foreign loans we may count only the metallic reserve at home, and the ratio of this figure to total notes in circulation declined to 10 per cent by the middle of 1920. Or using the usual banking terms, the ratio of metallic reserve to note and deposit liabilities combined declined from 59.9 on June 26, 1913, to 9.3 on June 24, 1920.

ii. *Gold Policy*

(a) *The Pre-War Conditions*—

Before the war the reserve of the Bank of France was large both in comparison with the other central banks of issue and in comparison with the total notes issued. For a number of years previous to the war the bank had been increasing its gold reserves and in the year preceding the war the gold reserve had increased from fr. 3200 million on June 26, 1913, to about fr. 4000 million on July 30, 1914. In addition to these fr. 4000 million there was held by the public about fr. 3000 million.[11] The problem as it appeared to the officials of the Bank of France was not only to retain all the gold of the bank but to embargo exports of gold and to withdraw the metal from circulation.

(b) *The Effect of the War*—

Exports of gold were forbidden to everyone except the Bank. Like Germany, France inaugurated a campaign for the transfer of gold, held by the public, to the bank of issue. As a result of this propaganda the holdings of the Bank of France rose from fr. 4141 million at the outbreak of the war to fr. 5015 million by the end of 1915. By December 18, 1916, the gold turned in by the public amounted to fr. 1948 million.[12] After the outbreak of the war the highest gold holdings were fr. 5,590,671,000, reported September 1, 1920, and the lowest were fr. 3,907,363,000, reported May 20, 1915.

To compel the surrender of gold the government passed a law demonetizing the outstanding *louis d'or* and the half *louis* and minting coints of new design which alone would be current.

[11] Lévy, Raphael-Georges, French Money, Banking and Finance During the Great War. Quarterly Journal of Economics, November, 1915. Anderson refers to several other estimates, p. 83.

[12] London Economist, December 23, 1916.

Furthermore, the law prohibited the melting of these coins and the exportation of gold coin or bullion. In this way it was hoped to force into the bank such gold as had not been turned in voluntarily during the war.

Gold was exported in order to obtain credit in England and in order to correct the exchanges. At the end of 1918 fr. 2037 million of gold was held abroad of which fr. 1955 million was in England to cover loans by the Bank of England and by the British Exchequer, to be repaid as the French obligations to England are liquidated.[13] This gold, even though held abroad, was still considered by the French as part of the reserves of the Bank of France. This procedure may be justified in view of the fact that during the year 1919 fr. 59 million in gold was returned to France upon the repayment by the French government to Great Britain of credits amounting to £7 million, or at par about fr. 176 million. However, about 520 millions sterling French treasury bills are held by the British Treasury and Bank of England.

From July 30, 1914, to December 31, 1919, the Bank of France received fr. 2505 million of gold, which came chiefly from circulation, in response to appeals to the public. During the same period the Bank of France exported fr. 1067 million of gold to pay for war supplies and to maintain its credit abroad. The net increase for the period therefore was fr. 1438 million. Nevertheless, owing to the increase in notes outstanding, the ratio of metallic reserves in vault to notes declined from 73 per cent at the end of 1913 to 10 per cent in the middle of 1920. On December 26, 1919, the Bank of France had in its vaults fr. 3600 million, which sum remained fairly constant throughout 1920.

(c) *An Appraisal of the French Gold Policy*—

The Bank of France has been criticized for its suspension of specie payment in spite of the fact that its ratio of gold to notes was probably the highest in Europe before the war.[14] However, this criticism is unwarranted because the increase in the note cir-

[13] Report of the Bank of France, 1918. Economiste Français, February 15, March 1 and 8, 1919, pp. 206-7, 267-8, 297-300.

[14] Anderson, p. 105, and Laughlin, p. 151. For presentation of French point of view, see Guilmard, Le rôle de l'or dans une periode de guerre. Bulletin de la Société d'Economie Politique, November 4, 1916, pp. 106–118.

culation was more than 6 times that of the gold in vault. The bank would have been unjustified in suspending gold payments in a commercial crisis, but the events of the war and the inevitable policy of financing the war to a considerable extent by note issues vindicate the policy of the governors of the bank. Furthermore, the French policy was precisely the same as that of the British. During the war Bank of England notes were inconvertible and the British currency notes were convertible only theoretically.

Again, the Bank of France has been criticized for not exporting gold to correct the adverse exchanges. Here again the same defense holds. The amount of gold available was utterly inadequate to be effective. Besides, France could not follow the British policy because Great Britain controlled the South African gold mines and was able to utilize newly mined gold. Few other nations could do likewise. Finally, during the war the French regarded their gold as the last arrow in their quiver, and after the war expected that the resumption of specie payment would be hastened as a result of the policy of husbanding their gold supply.

The utility of a large gold supply of course is lessened by the inconvertibility of paper. The value of paper money is based upon the possibility of obtaining specie. However, when the note issues increase as greatly in relation to the gold reserves as in the case of France the value of the metallic reserve is chiefly psychological. The depreciation of paper currency is an indicator of the likelihood of redemption. The larger the gold reserve the greater is that likelihood. To some extent therefore the possession of a large, though inconvertible, gold supply does help to maintain the value of depreciated paper.

The gold program is merely one phase of the larger policy of financing the war. As a result of her financial unpreparedness, France could not obtain adequate revenue from taxation during the war. This condition in turn increased the difficulty of floating long-term loans. Therefore, France had to rely upon note issues and upon short-term treasury bills, which, rediscounted at the bank, furnished a basis for further note issues. France, however, was no more delinquent than Great Britain in failing to enforce a sound economic policy, to lessen the financial burden. France, like England at the beginning of the war, adopted the policy of "business as usual" and made no attempt to control nonessential production, or to divert labor and capital into the

war industries. Other means of accomplishing this purpose were sought, namely the bidding up of prices and the inflation of the currency. Had France socialized her war economy, as England and the United States did later in the war, had she restricted non-essential production by means of embargoes on imports and exports, by establishing priority in raw materials, transportation and finance, the need for issuing notes or resorting to inflation would have been greatly reduced. The delinquency of France is not distinctive, it is a matter of degree. She erred more than Great Britain and the United States, not differently.

iii. *Advances to the State* [15]

Advances by the Bank of France to the government rose rapidly, amounting to fr. 3600 million in December, 1914, to fr. 5000 million at the end of 1915, and to about fr. 17,000 million at the close of hostilities. In the year following the armistice the advances rose to fr. 25,500 million, an increase equivalent to half the amount advanced during four years of war, and the end has not yet been reached.

(a) *Terms of Advances*—

The Bank of France advances fr. 200 million to the government without interest. Upon advances up to fr. 21,000 million the bank charges 0.48 per cent interest. Upon the next fr. 3,000 million the interest charged is 0.355 per cent and above fr. 24,000 million the bank receives 3.0 per cent interest.

(b) *Relative Importance of Advances to the State*—

The bank advances amounted to fr. 25,835 million, and constituted 12 per cent of the total debt, fr. 215,399 million on December 31, 1919. The advances to the state were the largest part of the item "total government securities." At the signing of the armistice advances to the government constituted 50.3 per cent of the total assets of the bank, and in the middle of 1920 this item had increased to 60.1 per cent of the total assets. These figures

[15] Liesse, André, Les Avances de la Banque de France a l'Etat. Economiste Français, May 1, 1920, pp. 545–547. The laws authorizing an increase in the advances to the state and the simultaneous rise in the limit of bank notes issuable are given in the Journal Officiel and quoted in the Economiste Français, 1919–1920.

are of great significance in judging the financial prospects of France. The liquidity of the government advances, their refunding either quickly by loans or over a long period of years out of tax revenues, is essential to make the bank again a flexible instrument of private credit.

(c) *Advances to Foreign Governments*—

In addition to the advances to the French government the Bank of France also discounted treasury bills in which form advances were made to foreign governments, allied to France in the war. At the end of 1915 this item amounted to fr. 630 million but increased over fivefold by the end of 1918 and sixfold by the middle of 1920, when they amounted to about fr. 3860 million. In the statement of June 24, 1920, the advances to the foreign governments constituted about 9 per cent of the total assets of the Bank of France.

(d) *Repayments of Government Advances*—

The proceeds of long-term loans floated during the war were applied repeatedly to the repayment in part of the advances of the Bank of France. For instance on November 25, 1915, the advances to the government amounted to fr. 7400 million and by December 30, 1915, were reduced to fr. 5000 million. From October 26, 1916 to November 30, 1916, the advances declined from fr. 8600 million to fr. 6500 million. Again from August 29, 1918 to November 28, 1918, the advances declined from fr. 19,150 million to fr. 17,000 million. There were no reductions or repayments up to the spring of 1920 because in the interval between the signing of the armistice and the latter date no long-term loans were floated. During the war the total amount of advances repaid to the bank amounted to fr. 8850 million.[16]

(e) *Advances After the Armistice*—

Under the financial policy pursued after the armistice France desired to avoid putting additional burdens on the taxpayers or on the investment market during the transition period in order that private initiative might operate freely and thus bring about the return to normal conditions. This policy of course involved an

[16] Report of the Bank of France, 1918. Economiste Français, May 24, 1919, p. 644.

increase of advances by the bank to the state, an increase of notes and a further rise of prices. Throughout the war the management of the Bank of France urged the Treasury to avoid a resort to bank advances and note issues, but complied with the requests of the government.[17] When the proceeds of the November, 1918, loan were exhausted the government increased the maximum advances authorized from fr. 21,000 million to fr. 24,000 million. About two months later, on April 24, 1919, in spite of the protests of the directors of the bank, they raised the authorized limit by another fr. 3,000 million. The government, however, did agree to retire this amount out of the proceeds of the next loan, thus reducing the maximum authorized to fr. 24,000 million, the limit set on February 13, 1919. It was not feasible to keep the agreement. At the end of 1919, the total advances authorized were fr. 27,000 million and the amount actually paid to the state was fr. 25,500 million. To this sum, however, must be added treasury bills discounted by the Bank of France for the purpose of enabling the French government to extend credit to its Allies. At the end of 1919 this item amounted to fr. 3755 million, making a grand total of advances by the Bank of France to the state of fr. 29,255 million. At the end of 1920, advances to the state rose to fr. 26,600 million, and advances to foreign governments fr. 4,180 million, or a total of fr. 30,780 million.

(f) *Amortization Fund*—

Plans have been made to reduce this enormous debt of the state to the bank. The law passed on December 20, 1918,[18] renewing the privilege of the bank to issue notes for 25 years from January 1, 1921, made provision for increasing the amortization fund. Under the agreement of September 21, 1914, interest on loans to the government was to rise from 1 to 3 per cent one year after the cessation of hostilities and the proceeds were to be applied to an amortization fund. The bank was likewise to make a special contribution of 50 per cent of the interest payable by the state on advances to the French government and 85 per cent on

[17] Jèze, Gaston, La résistance a l'émission de papier monnaie. Rev. Sci. Leg. Fin., 1919, pp. 219, *et seq.*

Journal Officiel, Chambre, Débats, pp. 10, 68, *et seq.*, March 7, 1919, containing exchange of letters between the governor of the Bank of France and the Minister of Finance.

[18] Journal Officiel, December 22, 1918.

the interest received on advances to foreign governments. The interest received by the bank on advances to the French government is as follows: On a permanent loan of fr. 200 million, no interest; on special advances up to fr. 21,000 million, 0.48 per cent; on special advances of the next fr. 3000 million, 0.355 per cent; on special advances above fr. 24,000 million, 3 per cent interest goes to the amortization fund. The law has been made retroactive to January 1, 1918. The amount to be contributed by the bank to the amortization fund for the period August 1, 1914, to December 1, 1917, has been fixed at fr. 200 million.[19] By the end of 1918 the bank had paid in fr. 237 million out of profits on advances to the state and on discounted treasury bills covering advances to foreign governments. The special reserve to amortize advances amounted to fr. 125 million at January 1, 1921, and is estimated to be fr. 800 million at the end of 1921. According to an agreement on April 14, 1920, between the Minister of Finance and the governor of the Bank, the limit of the advances should have been reduced by January 1, 1921, from 27,000 to 24,000 million francs. This was not feasible, and on December 16, 1920, a new agreement provided that the limit be maintained at fr. 27,000 million till January 1, 1922. The government undertook to repay fr. 2000 million before that date and a like sum annually thereafter.[20] Whether this contract can be carried out unrevised remains to be seen.

iv. *Loans and Discounts*

(a) *Decline During the War—*

Loans and discounts, which represent the commercial activities of the Bank of France, increased from fr. 1527 million on December 26, 1913, to fr. 2444 million on July 30, 1914, owing to the heavy rediscounts by the Bank of France because of the war scare. A very sharp decline followed and on December 10, 1914, it amounted to only fr. 213 million. Not until after the war did this item reflect the resumption of commercial activity.

On June 27, 1918, there was a rise to fr. 1360 million, and a decline subsequently to fr. 1002 million on August 8, 1918, and further to fr. 875 million on June 26, 1919. The resumption of

[19] Thackara, A. M., *ibid.* Also Report of Bank of France, 1918.
[20] Journal Officiel, January 2, 1921.

commercial activity after the war raised loans and discounts to levels higher than before the war; at the end of 1920, the amount was fr. 3311 million. The Bank of France in the crisis before the war as well as in the resumption of trade after the war continued to discount commercial bills and thus enabled banks and private individuals to meet their liabilities.

(b) *The Rates of Discount*—

The rate of discount of the Bank of France changed less frequently than did that of the Bank of England, because the former is less sensitive owing to its larger gold reserve with respect to liabilities, and owing to its smaller dealings in bills and to less necessity of regulating their volume by a varying rate of discount. The highest rate during the war was 6 per cent. On August 20, 1914, it was reduced to 5 per cent, at which level it remained unchanged up to April 8, 1920, when it was raised to 6 per cent. About the same time the rates of discount of the Bank of England and of the Federal Reserve banks also were raised. The desire to finance the transition by easy money kept the official discount rate low until the spring of 1920.

v. *Moratorium Bills*

As commercial discounts declined sharply at the beginning of the war, the item "moratorium bills" appeared—that is, bills matured and extended. These reached a high level of fr. 4476 million in October, 1914.[21] As moratorium bills declined new commercial bills or loans and discounts rose. The moratorium bills declined from their high level and on December 31, 1914, amounted to fr. 3351 million, on December 30, 1915, to fr. 1834 million, on December 28, 1916, to fr. 1339 million, on December 26, 1918, to fr. 1028 million, on December 26, 1919, to fr. 626 million, and in the middle of 1920 to fr. 523 million.[22] Against moratorium bills at the end of 1919 the Bank of France had securities amounting to fr. 703 million, a sum in excess of its liability by fr. 77 million.

[21] Report of the Bank of France, 1919; also Consul General Thackara's report, p. 19.

[22] From the reports of the Bank of France.

This continuous decrease in the moratorium bills is an indication of returning financial soundness. The cause of the reduction was the policy of narrowing the extent of the moratorium from time to time, as noted above. The reduction in 1918 was largely due to the law of July 26, 1918, and the decree of December 29, 1918, which lifted the moratorium for beneficiaries of war profits and for residents in the interior of the country, who had been able to continue agricultural operations. The moratorium was lifted completely after January 1, 1921.[28]

vi. *Notes in Circulation*

The three leading belligerents in Europe resorted to issues of paper money. In Great Britain the government itself issued currency notes. In France the government borrowed of the Bank of France and the Bank issued paper money. In Germany the same held true as in France except that new financial institutions, the loan bureaus, were created, and under the law their notes were made the equivalent of cash or gold in affording a basis for the issue of additional Reichsbank notes. Only technically is it true that in France the government did not resort to printing of paper money.

(a) *Terms of Issue*—

The notes were issued upon specie, upon statutory and commercial loans, upon advances against securities, and upon advances to the state. In France before the war there was no limitation as in England that the notes issued should represent an equivalent amount of gold. Nor did the French system require as in Germany and the United States that there be a fixed ratio of gold and commercial bills to notes. This freedom of note issue was a pillar of strength during a temporary crisis but because of its abuse during the war, constituted the essential weakness of the post-war credit and currency situation in France.

(b) *Forms of Issue*—

In preparedness for emergencies, the French government had accumulated a large quantity of paper money in advance. This measure recalls those that Germany took in anticipation of the struggle. England on the other hand was so thoroughly unpre-

[28] Journal Officiel, December 30, 1920.

pared that upon the suspension of specie payment there was a lack of paper money, and postal money orders were made to pass from hand to hand like notes. In addition to the regular large denomination notes of the Bank of France, 1-franc and 50-centime notes were issued by the chambers of commerce upon the deposit of an equal amount of Bank of France notes. Furthermore the *Bons de Defense Nationale* in denominations of 5 francs and 20 francs passed from hand to hand like currency and were used to pay for the delivery of war material. In the loan floated in the autumn of 1920, the bearer bonds with the first 5 coupons attached were issued in a size identical with bank notes.

(c) *The Continuous Increase in Volume*—

During the Franco-Prussian War the note circulation hardly doubled. In the 40 years from 1872 to 1911 the note circulation increased from fr. 3200 million to fr. 6800 million, an increase of 2.13 times. In 5 years of the World War the note circulation increased 6.03 times. It would have taken 120 years to attain an equivalent note expansion under pre-war conditions. The notes authorized to be issued were as follows:[24]

Date	Million francs
Aug. 12, 1870	1,800
Aug. 14, 1870	2,400
Dec. 29, 1871	2,800
July, 15. 1872	3,200
Jan. 28, 1893	4,000
Nov. 17, 1897	5,000
Feb. 9, 1906	5,800
Dec. 1911	6,800
Aug. 5, 1914	12,000
May 11, 1915	15,000
Mar. 15, 1916	18,000
Feb. 15, 1917	21,000
Sept. 10, 1917	24,000
Feb. 1918	27,000
May 18, 1918	30,000
Sept. 18, 1918	31,500
Mar. 1919	36,000
May, 1919	40,000
Aug 1920	43,000

[24] Economiste Français, May 24, 1919, pp. 643–5. Paris correspondence London Economist, May 3, 1919. Journal Officiel, Oct. 10, 1920.

The actual issue of notes shown elsewhere below never quite reached the maximum amount authorized. The maximum outstanding was 39,644,392,000 francs on November 3, 1920.

The huge increase in the note circulation after the armistice was due to the fact that the French government wished to finance the transition period without burdening the taxpayer or drawing too heavily on the investment market. As a result of the continuous increase in the issues of banknotes prices rose rapidly and when the dangers of the policy of easy financing became apparent public opinion forced the Ministry to resort to taxation. The restoration of the devastated areas required a large outlay and the simplest way to get it was to water the circulation. In this regard the French financial policy was based on a mistaken notion. The monetary functions of the state, or the right to issue notes, were confused with the fiscal function, or the power to raise funds. This was true not only in France. Whereas France relied on note issues, Great Britain relied on ways and means advances from the Bank of England and upon the issue of Currency Notes.

vii. *Minor Operations of the Bank of France*

Among the minor operations of the Bank of France was the reimbursement to business houses for the loss of credits to Russia. It also acted as agent of the state in helping to float the loans. Of the fr. 30,000 million of the loan floated in 1918, 45 per cent was subscribed through the Bank. Furthermore, in the mobilization of securities the Bank aided in the transfer to the French Treasury of the French holdings of bonds of neutral countries. The bonds were received in all the branches of the Bank and the amount received by the end of 1917 aggregated 774,140 securities with a par value of about fr. 640 million.[25] The Bank was largely instrumental in furnishing exchange at fixed rates for the accommodation of the commerce of the country. It also aided the Treasury in controlling the exportation of capital and the importation of securites.

D. The Effects of Inflation

The effects of inflation in France were similar to those experienced during the French Revolution, and to the effects in other

[25] Bank of France report, 1917.

countries during the World War. The overissue of paper money led to its depreciation, to a rise in prices, and an increase in the cost of living and of the administration of the government. The foreign exchanges likewise depreciated. Government credit declined both at home and abroad. As the purchasing power of the franc declined, the public debt rose, increasing rapidly. Speculation and profiteering were rife. Legislation fixing prices was evaded. As paper depreciated metallic currency rose to a premium and when prohibitive legislation was enacted, specie was hoarded or melted. Paper money of small denominations had to be issued to replace the vanished currency. To reduce the need for currency the government and private bankers attempted to popularize the use of checks. Inflation was reflected in the private banks to a limited extent.

i. *The Rise in Prices*

While the opponents of the quantity theory of money affect to see other causes than the increase in the notes outstanding, this factor undoubtedly was the chief cause of the rise in prices. Important factors, other than the increase in the quantity of money were, the pressing demand of the government for goods, the dislocation of labor, the occupation of the coal fields and of the industrial regions of northern France, and the shortage in shipping. However the correspondence in the several countries between the increase in notes outstanding and the rise in prices is so close, as shown in tables on page 187 as to leave no doubt as to the prime cause of the price advance.

The table of prices by quarter years from 1913 through 1918 and by months during 1919 and part of 1920 shows a rapid increase through 1915, a moderate increase through 1916, again a rapid increase through 1917, and still more rapid increase through 1919 and part of 1920. The increase of prices between the last quarters of successive years, using the average prices from July, 1913, to June, 1914, as a basis of 100, was as follows:

1913–1914	8
1914–1915	51
1915–1916	41
1916–1917	96
1917–1918	63
Jan., 1919–Jan., 1920	139
Jan., 1920–April, 1920	97

The following table shows differences between wholesale prices in France and the United States through the year 1918:

INDEX NUMBERS OF WHOLESALE PRICES IN FRANCE AND THE UNITED STATES, BY QUARTERS AND YEARS, 1913–1918[26]

By Quarters						By Years		
France*	U. S.†	Difference	France	U. S.	Difference	France	U. S.	Difference
1913:			1916:			1913:		
101	102	−1	180	118	62	100	101	−1
101	100	1	191	123	68	1914:		
100	101	−1	187	125	62	102	99	3
99	102	−3	199	139	60	1915:		
1914:			1917:			140	102	38
100	100	0	224	152	72	1916:		
101	97	4	258	177	81	189	126	63
101	100	1	274	187	87	1917:		
107	98	9	295	182	113	263	175	88
1915:			1918:			1918:		
125	100	25	321	187	134	339	194	145
136	100	36	334	190	144			
142	102	40	348	197	151			
158	107	51	358	202	156			

*General Statistical Office.
†Price section, War Industries Board.

[26] Mitchell, Wesley C., International Price Comparisons, Department of Commerce, Washington, D. C., 1920.

Subsequent figures of prices for the months of 1919 and 1920 are given herewith, with the differences between the prices in the United States and France, and also slightly different figures, from another source, for the years 1913 to 1918.[27]

COMPARATIVE PRICE INDEXES
(Index for 1913=100)

Year	U. S.*	France †	Difference
1913	100	100	0
1914	100	101	1
1915	101	137	36
1916	124	187	63
1917	174	262	88
1918	197	339	142
1919:			
January	203	348	145
April	203	332	129
July	218	349	131
October	223	382	159
1920:			
January	248	487	239
April	265	584	319
July	262	496	234
October	225	502	277
December	189	434	245

*U. S. Bureau of Labor Statistics.
†Bulletin de la Statistique Générale.

In view of the fact that the United States was a free gold market, except during the period of the gold embargo from October, 1917, through May, 1919, the gap between prices in France and in the United States is a true measure of the depreciation of paper in France. The great difference which became evident in 1920 shows the full effect of the huge volume of note issues put out by France. The difference between prices in the United States and Great Britain is far smaller, as the result of Britain's prudent post-war policy in issuing notes. The circulation of the notes of the Bank of France by approximately quarter years is given herewith. The parallelism between the increases in notes and the increases in prices is evident.

[27] Federal Reserve Bulletin, August, 1920, and February, 1921.

NOTES OF BANK OF FRANCE IN CIRCULATION

(in million francs)

Date	Million francs	Relative figures	Date	Million francs	Relative figures
1914			1918		
July 30....	6,683	100	Mar. 28...	25,179	378
			June 27...	28,550	423
1915			Sept. 26...	29,922	448
Jan. 28....	10,474	157	Nov. 28...	29,072	435
Mar. 25....	11,177	168	Dec. 26...	30,250	453
June 24....	12,105	181			
Sept. 30....	13,458	202	1919		
Nov. 25....	14,278	214	Mar. 27...	33,372	500
Dec. 30....	13,309	199	June 26...	34,442	515
			Sept. 25...	35,787	536
1916			Dec. 26...	37,274	558
Mar. 30....	14,952	224			
June 29....	15,806	237	1920		
Sept. 29....	16,714	250	Mar. 25...	37,569	563
Nov. 30....	16,119	241	June 24...	37,544	562
Dec. 28....	16,679	250	Sept. 30...	39,208	588
			Dec. 31...	37,902	567
1917					
Mar. 29....	18,460	276			
June 28....	19,823	297			
Sept. 27....	20,995	315			
Dec. 26....	22,337	334			

ii. *Economic Disturbances*

The rise in prices was the result of natural law. Nevertheless legislators, ignoring the cause of the difficulty, attempted to cope with it by regulating prices despite the fact that the history of the currency and of prices in the French Revolution affords abundant evidence of the limitations of such measures. Prices were fixed on some commodities and as a result capital and effort were shifted from the field of fixed prices into that of free prices. When the price of wheat was fixed, farmers planted oats. Or they sold oats for a profit and fed wheat to their stock. Subsequently when a law was passed prohibiting the feeding of wheat to animals, other means of evading the price legislation were devised. Farmers then held back and refused to sell or they bartered their produce for commodities. Profiteering in commodities was widespread and the benefits did not flow to the government in taxes as in Great Britain and the United States where stringent excess-profit taxes were

enacted and administered. Speculation increased as a result of the rise in prices. Stocks rose in proportion to the decline of the purchasing power of the franc. Bondholders found their incomes declining in purchasing power. The whole gamut of historic economic disturbances were repeated.

iii. *Depreciation of Foreign Exchange*

The effect of inflation on foreign exchange will be treated in a separate section. It is sufficient to note here that the exchange rate of the franc abroad declined in the free gold markets *pari passu* with the depreciation of the notes at home. That francs did not so decline in Great Britain or in the United States during the period of our belligerency was due to the artificial support of French exchange in the London and New York markets respectively. The reason for the depreciation is evident. As an inconvertible note depreciates in terms of gold at home so an inconvertible bill of exchange depreciates internationally. When gold quotations were published in 1920, the depreciation of foreign exchange in dollars corresponded closely to the discount on paper. The absence of gold as a corrective, or the removal of the gold shipping points which limited fluctuations, made depreciation on the international markets inevitable.

Just as the attempt to maintain a depreciated franc at par internally worked hardship on certain classes and led to evasion, so the attempt to hold a depreciated franc at par internationally led to hardship and injustice. In the competitive international market for commodities, the franc fell to its natural level. But in the monopolistic market for cable services the government regarded the franc as the equivalent of its pre-war value in gold. As a result, the Western Union Telegraph Company refused to accept messages out of France for the United States unless paid on the gold basis. The French government, however, claimed that the depreciated paper franc was legal tender and had to be accepted at its mint parity. The Western Union Telegraph Company did internationally what the French farmer did internally, namely, refused to sell at fixed prices in depreciated paper.[28]

[28] New York Times, December 10, 1920.

iv. *Premium on Specie*

The inevitable result of the excessive issue of notes was the appearance of a premium on specie. Originally, gold and silver were traded in illegally and *sub rosa* in much the same way as gold was speculated in frankly and legally in the Gold Room after the Civil War. When speculation was detected, legal penalties were imposed. Cases of detection were unusual, however. The law-abiding Frenchman, however, was able to invent means of circumventing the law. Instead of exchanging his specie for notes at a premium, he melted the coin and sold the gold. Then a new law was passed which prohibited the melting, recoinage or withdrawal from circulation of metallic money, under penalty of a fine of 5000 francs and imprisonment up to six months. The legislation prohibiting the hoarding of gold and requiring its surrender for notes led to some absurd situations. For instance, American paper money had a higher value than American gold money in France, because the law required gold to be surrendered. The difference was about 3.86 cents on the dollar.[29] The depreciation in paper was complicated further by the rise in the price of silver and silver was bought up illegally at 1.5 times its face value and was hoarded. New metallic coins put out by the mint vanished upon issue.

However, in 1920 quotations for gold were published. They measured the depreciation in terms of paper money as truly as the foreign exchange rates in terms of dollars. A kilogram of find gold is worth 3437 francs at parity, but it was quoted at 11,200 francs per kilogram on May 5, 1920, or 3.26 times parity and at 7,800 francs on July 21, or 2.37 times parity.[30] Dollar exchange at Paris and prices of gold moved in close sympathy.

v. *Shortage of Specie and Demonetization*

As a result of the influences mentioned there was a shortage of small change. Not only were gold and silver scarce but copper and nickel as well. When the copper *sous* disappeared in 1917 the government put out 15 million nickel coins in replacement but

[29] From Governor Harding's testimony before the Senate Committee on Banking and Currency in its hearings on the Federal Reserve Foreign Bank Bill. Federal Reserve Bulletin, August, 1918, p. 726.

[30] Statistiques Générales, ix: iv, July, 1920, p. 331, and x: 1, October, 1920, p. 38.

these disappeared shortly after their issue. Restaurants in Paris posted notices that customers would either have to bring their own change or accept postage stamps. To relieve the shortage the government decided in the autumn of 1917 to demonetize certain coins, declaring them no longer current and calling for their surrender.

vi. *Issue of Paper Money of Small Denominations*

As gold and silver disappeared from circulation in the early part of the war the local chambers of commerce issued notes of 1 franc and ½ franc to replace the small change which disappeared. These notes were secured by notes of the Bank of France of a larger denomination. In the course of circulation these notes would be returned to the issuing authority by the Bank of France. The Paris Chamber of Commerce issued fr. 15 million in denominations of 2-franc, 1-franc and 50-centime notes, which were put out at the rate of fr. 200,000 per day during the summer of 1920. Again, the smaller denominations of treasury bills, *bons de la defense nationale,* were used as currency and passed from hand to hand like notes. This device is strikingly similar to the use of interest-bearing *mandat* of the French Revolution or our Continental currency.[31] Apparently the lessons of history are of no avail.

The small denomination bonds of the loan floated in October, 1920, were identical in size with banknotes and were intended to pass as currency while accumulating interest to the holder. They had five interest coupons attached. In this respect they were similar to an issue during the Civil War. The difficulty we experienced was that the notes were very scarce at the time that the accrued interest made it worth while for investors to hoard them, and became abundant immediately after the payment of interest. The result was an embarrassing alternation of expansion and contraction of the currency.[32] The extensive use of paper money wore it out very rapidly and token money made of an alloy was substituted in the spring of 1920. This had a metallic ring but was not of sufficient value to melt or smuggle out of the country or even to hoard. The distinctive feature of the new coins was that they were more durable than paper. They were also issued by the chambers of

[31] White, Horace, Money and Banking, pp. 134 and 158.
For illustrations of emergency coinage and notes see Benjamin White, Currency of the Great War. London: Waterlow and Sons, Ltd.: 1921.
[32] White, Horace, *ibid.,* p. 158.

commerce and were secured by equivalent amounts of Bank of France notes.

vii. *The Disruption of the Latin Monetary Union*[33]

The Latin Monetary Union was an attempt to unify the monetary systems of several countries and it accomplished this purpose effectively before the war. In addition it diminished the slight fluctuations of exchange rates because the currencies of the countries in the union circulated interchangeably. However the war upset the basis of the union. The similarity between the French franc and the Swiss franc became one of name only. Because of the depreciation of the French franc Switzerland was flooded with depreciated French coins. The result was a surplus of currency in Switzerland and a shortage in France, which in part accounts for the measures described above. To overcome this difficulty the Convention of 1885 of the Latin Monetary Union was revised with the object of withdrawing the depreciated French coins from Switzerland. The revised terms of the Convention are given herewith:[34]

Article 1. The French and Swiss governments shall each withdraw from circulation on their respective territories all silver coins of the other country of the value of two francs, one franc, fifty centimes, and twenty centimes.

Article 2. Such coins are to be no longer received in public payment when three months have elapsed from the entry into force of the convention.

Article 3. The coins so withdrawn from circulation are to be put at the disposal of the state of their origin.

Article 4. Switzerland is to be given the right of increasing the contingent of small silver coin per head of its population from sixteen to twenty-eight francs.

Article 5. Switzerland may reserve the quantity of French coin she judges indispensable for her own needs from the amount by which the French coin in Switzerland exceeds the amount of Swiss coin in France; Switzerland may centralize the coin so reserved and use it as a guarantee for an equivalent amount of two-franc, one-franc, and fifty-centime notes, which she is entitled to issue on it. Unless arrangements to the contrary are made in the meanwhile all French coin reserved by Switzerland

[33] Lansburgh, A., Der Lateinische Münzbund, Die Bank, June, 1920, pp. 343-363. See also Willis, H. Parker, Genesis of Latin Monetary Union, Chicago, 1901, and History of Latin Monetary Union, Chicago, 1901.

[34] Report of the British Minister to Switzerland, Board of Trade Journal, June 10, 1920, and August 12, 1920.

is to be placed at the disposal of the French government four years after the entry into force of the convention. . . .

Article 8. Switzerland is to inform France of the quantities of coin eventually reminted. For such excess of French money as France immediately receives from Switzerland, France undertakes to repay Switzerland, as also for such centralized French money as Switzerland may return her at the end of four years. Repayment may be affected at France's choice either in the coins of the Latin Union, preferably Swiss, or in gold coin of ten francs and upwards, or in bills on Switzerland.

Article 9. Each government is to bear the cost of collecting and restoring the coin of the other government.

Article 11. So long as each country refuses to accept the coin of the other in public payment, each country may also interdict the importation of the other's coin.

Article 14. The governments of the contracting countries agree to take measures to prevent the clandestine melting-up of coin emanating from countries belonging to the Union.

French silver coins in the denominations of 2 francs, 1 franc and 50 centimes have accordingly been withdrawn from circulation in Switzerland with the concurrence of France. During September, 1920, French paper was depreciated 58 per cent in Switzerland; consequently silver coins were smuggled from France into Switzerland in spite of the maintenance of guards on the Franco-Swiss frontier. Under the agreement the federal treasury in Berne acted as the receiving and assaying station for the French coins. Over fr. 16 million were returned to France within 60 days, and in the transactions at the Swiss Federal Mint the quantity of silver turned in was three times the amount of silver coins asked for in exchange, a fact which indicates the redundance of silver. France settled for the French coins repatriated by means of bank drafts in Swiss francs. The time limit on the exchange of coins was September 30, 1920, and holders after that date had to stand the loss. Judging from the fate of the Latin Monetary Union, the proposals for a world currency after the war seem futile.

viii. *Popularization of Checks*

It is an error to assume that excessive note issues lead to inflation any more than excessive bank credits. The condition of the Bank of France would not be greatly affected if the liabilities were shifted, if deposits were increased and notes correspondingly decreased. The attempt to popularize the use of checks in France resulted from a mistaken notion that the rise in prices was due to the circulation of paper. Deposit banking has the advantage that

the physical difficulties are less when inflation is produced by deposits than by checks.

The attempt to develop deposit accounts and payments by check dates back to 1859 when the Crédit Industriel et Commercial was established. Other companies were founded later, as the Société Generale and the Crédit Lyonnais. However, the association of monetary value with physical tokens was so deep-rooted in the minds of the French public that the attempts were not successful. The Chambre de Compensation, the leading clearing house established in 1872, fell into disuse, particularly because of the system of credit transfers through the Bank of France. The desire to dispense with the huge amount of currency and small change that became necessary as the result of inflation during the war led to a revival of the clearing-house scheme, and a Caisse de Compensation formed in July, 1917, for the use of the British and American banks, was merged in a new Chambre de Compensation, an organization with a larger membership. It has been unsuccessful in overcoming the preference of the French public for notes and its prejudice against payment by check.[34a]

ix. *Private Banks Affected*

A few of the distinctive features of the French banking system have some bearing on a study of the effects of the war on the French private banks. Because the French relied on notes rather than on deposits as a means of transacting business, the huge inflation in France did not result in an increase of the deposit credits of the private banks, as in Germany and Great Britain. The private banks were over-cautious in extending credit to their customers, and as a result the funds for war had to come from notes of the Bank of France and from short-term treasury bills. Had the banks adopted a more liberal commercial policy during the war, particularly in view of the availability of rediscounting facilities at the bank of France, the financing of the war would have been easier. As a result of this imprudently conservative policy in granting credit, acceptance liabilities declined. The balance sheets of the private banks show that they did not support French commerce and industry during the war. In fact, the availability of remunerative government paper probably accounted for the reluctance

[34a] Economiste Français, lxviii: 1, pp. 75, 203, 329, 491, 649, 779.

of the private banks to buy commercial paper. Treasury bills were liquid assets, because the Bank of France would rediscount them or else make loans against them as security. The item "bills discounted," included short-term government securities as well as commercial bills, as in the case of the German private banks. The following are the principal items as of December 31 of each year, from the consolidated statements of the three largest banks, the Crédit Lyonnais, the Comptoir National d'Escompte de Paris, and the Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France:[35]

PRINCIPAL ITEMS OF CONSOLIDATED STATEMENTS OF THE THREE LARGE BANKS OF FRANCE

(in million francs)

ASSETS	1913	1914	1915	1916	1917	1918	1919
Cash in vaults and balance at banks	471	1209	999	1052	1256	859	1064
Bills discounted and short-term national defense securities	3494	1309	1912	2531	3804	4636	8299
Debits in current account	1464	1298	1035	1011	1190	1528	2581
Advances on securities, including stock exchange loans	1058	920	682	636	632	588	746
Securities, including rentes	63	69	93	86	81	79	82
Financial participations	75	73	68	61	57	55	55
Forward exchange operations	....	....	42	178	108	208	227
Total (including items omitted above)	7174	5172	5192	5934	7520	8373	13,651
LIABILITIES							
Capital paid in	700	700	700	700	700	700	700
Reserve	329	343	334	268	269	269	295
Credits in current account	3067	2213	2074	2442	3576	3918	7288
Deposits (checking accounts, deposit certificates payable at sight, discount a/c)	2071	1355	1336	1660	2192	2579	4167
Deposits payable at fixed date	297	320	304	299	285	280	302
Acceptance liabilities	493	150	114	89	92	54	172
Total (including items omitted above)	7174	5172	5192	5934	7520	8373	13,651

A few of the outstanding features of this statement reflect the effects of the war. Cash in vault increased as a result of inflation. Commercial bills and treasury bills declined greatly in 1914 and did not regain their pre-war level until 1917. In 1918 and 1919 this item increased, particularly as a result of the resumption of commercial activity and also because of the extensive issue of short-term treasury bills after the armistice, when long-term loans could not be floated. Advances on securities declined and did not regain the pre-war level. Apparently less business was done in this field. Securities, including rentes, naturally rose in volume, as a result of

[35] Federal Reserve Bulletin, October, 1920.

the issue of war loans. Profits from underwriting declined during the war, because of the restriction on capital issues. Forward exchange operations, which reflected the activity of the Bank of France in supporting the exchange market, showed a large and continuous growth throughout the war. Debits in current account declined during the war but regained the pre-war level at the end of 1918. Credits in current account, as well as demand deposits, declined in 1914, regained their pre-war level by the end of 1917, and grew continuously thereafter. At the end of 1919 the effects of the industrial revival were evident. Both these items had risen to double their pre-war level. Acceptance liabilities greatly declined, probably in connection with the reduced volume of private trade of France. Time deposits, a small item, remained practically stationary throughout the war.

These conclusions are more obvious in the following table of relative figures for the important items:

RELATIVE FIGURES OF IMPORTANT ITEMS OF THE CONSOLIDATED STATEMENTS OF THREE LARGE BANKS OF FRANCE

ASSETS	1913	1914	1915	1916	1917	1918	1919
Cash in vaults and balance at banks	100	256	212	218	266	183	226
Bills discounted and short-term national defense securities	100	37	55	72	109	133	238
Debits in current account	100	89	71	69	81	104	76
Advances on securities, including stock exchange loans	100	87	64	60	60	55	71
Total	100	73	73	84	106	119	193
LIABILITIES							
Credits in current account	100	72	68	79	117	128	238
Deposits (checking accounts, deposit certificates payable at sight, discount a/c)	100	66	65	80	106	125	203
Deposits payable at fixed date	100	108	103	101	96	94	102
Acceptance liabilities	100	30	23	18	19	11	35

E. THE OUTLOOK

The outlook in France depends upon the ability of the Bank of France to reduce its note circulation and to eliminate from among its assets the large advances on government account and on account of its allies. As in our Civil War period there are two parties, one of which hopes to "stabilize" the currency at its present value; the other party expects to reduce the currency either by a slow process of annual amortization out of taxes or else rapidly out of large loans.

i. *The Expansion of Production to Absorb the Increased Currency*

In the 43 years from the end of the Franco-Prussian War to the beginning of the World War, the maximum note issues authorized increased about twofold. In the five years since the outbreak of the war the currency increased over sixfold. If the outstanding circulation at the end of the war is to be maintained, it will require at least 100 years at the pre-war rate of progress for production to increase sufficiently to require the present currency. The reduction of inflation by building up assets in back of the token of value will be a very long process. The rate of progress for several years after the war will certainly not be equal to that in the decade or two prior to the war. At best the whole period will be one of inconvertible paper, which implies wide fluctuations of exchange, the unsettlement of trade and the absence of sensitive regulation of trade, such as is possible when gold flows freely.

During the Franco-Prussian War, the advances to the state amounted to fr. 1470 million, a mere bagatelle against the fr. 26,600 million maximum outstanding at the end of 1920. And yet it took 7½ years, until January 1, 1878, to resume specie payment. If it required 7½ years to resume specie payment when advances to the state amounted to only fr. 1470 million, assuming the same rate of progress it would require over 130 years to get rid of the inflation resulting from fr. 26,600 million in advances to the state.

ii. *Deflation of the Currency*

The deflation of the currency is the more advisable course. This may be accomplished either by means of annual payments out of an amortization fund, or out of loans. M. Maurice Casenave estimated that fr. 2 billion a year would be available for the reduction of the advances to the state and therefore that the inflated circulation could be reduced to its pre-war basis in about 12 years.[36]

However, M. Casenave's estimate seem to be too high. The date of retirement of the first annual amount was postponed for a year from January 1, 1921. In the autumn of 1920, the annual

[36] Casenave, Maurice, The French Situation. Proc. Acad. Pol. Sci., ix: 1, p. 104. June, 1920.

sum available for amortization of the debt of the state to the Bank was estimated at fr. 300 million. To reduce the paper currency, amounting to fr. 39,000 million, to its pre-war level would require over 100 years if the same rate of amortization were maintained.

Apparently amortization by means of annual payments of interest on the note issue by the state will not deflate the currency as rapidly as is desirable. It is therefore necessary that long-term loans be utilized for this purpose. The French government expects to retire 2,000 million francs annually. The success of this policy rests on many factors, the rate of rebuilding of the devastated areas and the balancing of the budget. These two factors are closely related because a large section of the budget is offset by a credit called, "Expenses recoverable from Germany under the Treaty of Peace." Whether this section of the budget is to be balanced depends on Germany's recovery, which in turn is contingent on the removal of the obstacles to the restoration of normal conditions in Germany. In this task France has the power of decision and the responsibility therefor.

iii. *Analogy of the Civil War*

M. Casenave, in the address, quoted above, compared France after the World War with the United States after the Civil War. There are a few interesting statistics that will make clear the differences. In 1865 the debt of the United States was $2681 million and the note circulation was $715 million.[37]

With a population of 30 millions the per capita debt was about $90 and the per capita note circulation about $24. The period of inconvertible paper was 14 years, resumption of specie payment taking place in 1879. In the middle of 1920 France had a debt of fr. 233,000 millions and a note circulation of about fr. 39,000 million. Or taking francs at par the national debt of France was 46,600 million dollars and the note circulation was the equivalent of 8000 million dollars. With a population of 40 millions the per capita debt was the equivalent of $1165, or 13 times the per capita debt in the United States after the Civil War, and the note circulation was the equivalent of $200 per capita or about 8 times the United States figure after the Civil War. Assuming the rate of

[37] Mitchell, Sound Currency, vol. iv, No. 8, Hepburn, History of the Currency in the United States, p. 204.

progress of the United States after the Civil War, it would take France from 112 to 182 years to resume specie payments, depending on whether notes in circulation or public debt is taken as a basis of calculation.

iv. *Possible Remedy*

This conclusion is manifestly absurd. Many of the calculations with respect to the war itself failed to take into account non-mathematical factors. It may be that for France the ultimate solution would be a forced conversion and reduction of the rate of interest on the debt, a re-valuation of the franc, and the adoption of the gold-exchange standard, under which international gold settlements would be effected but not internal gold settlements. The arguments for this proposal are many. The injustice and the evils of inflation are a matter of the past. The harm is done. To attempt to deflate would be a proposal to enrich the speculators, both native and alien, by means of taxes paid by Frenchmen. This tax must necessarily fall on the masses because the taxation of wealth dries up the sources of capital and retards industrial development. Deflation therefore involves a second grave injustice. To revalue the franc near its current gold quotation and to start with a clean slate involves no greater injustice and may mean the resurrection of the nation from the ashes of war.

CHAPTER VIII

GERMAN CURRENCY AND CREDIT

A. History of the Reichsbank

i. *Development of the Central Bank*

A brief history of the development of the Reichsbank[1] is helpful in understanding the war-time developments in German currency and credit. The Reichsbank is an outgrowth of the Bank of Prussia and has practically a monopoly of the right to issue notes, except that the privilege is still retained by four private banks. The Bank of Prussia was founded in 1765 as a state institution. Even after it subsequently became a partly private institution in 1846, the control was vested in a *Kuratorium,* composed of representatives of the king. Originally, the Bank of Prussia was primarily a bank of issue, only later becoming a bank of discount and deposit. A precedent for the *Darlehnskassen,* the loan bureaus, established during the World War, is afforded by the practice of the Bank of Prussia, subsequently retained by the Reichsbank, of advancing money on commodities and on bullion and pledged securities at conservative valuations and for limited periods. The law of 1846 provided for, but fixed a limit upon the issue of notes, but this latter provision was thereafter repealed and the traditional banking ratio of one to three between the metallic reserve and the note circulation governed the note issue. At the time of the establishment of the Reichsbank in 1875, there were in the several German states thirty-three other banks of issue, many of which were born of the fiscal needs of their governments. To promote trade among the German states and with foreign countries the currency was unified. The payment of the indemnity

[1] Conant, Chap. viii.
Lansburgh, Alfred, Die Deutsche Bank, 1870 bis 1920. Die Bank, pp. 259-266.

by France enabled Germany to adopt the gold standard. The mark was made the monetary unit, although German economists had recommended the five-franc piece adopted at the International Monetary Conference at Paris in 1867. Silver coins, which had previously been legal tender, became token money, with limited legal tender privileges, except for the silver thaler until its demonetization in 1902.

ii. *Organization and Function of the Reichsbank*

As a result of Prussian and imperial legislation and of a convention between Prussia and the empire, the Royal Bank of Prussia ceased to function at the end of 1875 and transferred its rights and privileges to the newly formed Reichsbank, which, though privately owned, is under government direction. The bank is controlled by a council of curators, of which the president is the Imperial Chancellor and the members are named by the emperor and the Bundesrat. In the absence of the chancellor another official of the empire acts. The council of curators holds quarterly meetings. The administration of the Reichsbank is vested in the directorate, nominated by the imperial government. The stockholders have an advisory board of fifteen members, elected from among their number, one-third being chosen annually. They hold monthly meetings and advise on policies affecting the rate of discount and like matters. An executive committee of three has daily supervision of the bank's affairs.

Unlike the Bank of England, the Reichsbank has not a fixed fiduciary circulation, but against outstanding notes one-third of the amount must be in cash. A limited amount, *Kontingent,* may be issued without cover, and above this limit notes are under a tax or penalty, which hastens their retirement. Like the Bank of England, the circulation of the Reichsbank may be increased upon the surrender of the privilege of issue by any of the other issuing banks. The Reichsbank may expand its note circulation in time of need without furnishing metallic cover, by paying a tax weekly at the rate of 5 per cent per annum. This tax makes possible the expansion of the circulation in a crisis, but promptly retires it when the discount rate falls. The charter of the Reichsbank expired at the end of 1920 and the new law extending the charter gave the bank wider powers in dealing with foreign

exchange and provided for larger government participation in the profits of the bank.[2]

iii. *Control and Concentration of Gold Supply*

To centralize its gold reserves and to increase its control over the movement of gold, the Reichsbank developed several devices. To avoid the exportation of gold during the period of high exchange rates, the bank would buy foreign bills when exchange was cheap and would resell them when exchange rose sufficiently to produce an outflow of gold. Again, gold imports were encouraged by exempting advances upon them from interest charges for a limited period. To meet the demand for currency for quarterly settlement in business, the issue of uncovered notes, free from taxes, was increased during the last weeks of each quarter of the year and thus lessened the demand for gold coin. To economize in the use of gold the Reichsbank encouraged the development of the system of *Giro Verkehr,* whereby deposits at any branch of the Reichsbank were transferred without charge to a branch in another town. This is analogous to the check and clearing system in the United States. The Reichsbank also adopted the customary practice of maintaining a high discount rate to attract gold. The central gold reserve was built up shortly before the war by substituting notes of small denominations for specie and by bidding high for gold in the world market.

B. War Legislation, Policy and Expedients[3]

i. *Suspension of Specie Payment*

Upon the outbreak of the war specie payment was suspended. To centralize the gold of the country in the Reichsbank notes of 50 and 20 marks were issued under the law of 1906, prior to which date the lowest denomination was 100 marks. Finally mk. 120 million of silver token money was authorized to be coined,

[2] Report of the Reichsbank for the year 1919.
Liesse, André. Le Renouvellement du Privilège de la Reichsbank. Economiste Français, January 31, 1920, pp. 3–5.

[3] Bendix, Ludwig, Germany's Financial Mobilization.
Quarterly Journal of Economics, xxix, pp. 728, *et seq.,* August, 1915.
Going, Chase M., German War Finance. Journal of Political Economy, xxiv, pp. 513-547, June, 1916.

to replace gold in circulation. Reichsbank notes were no longer redeemable in gold. The Imperial Treasury was released from the requirement to redeem subsidiary coins in gold, but was permitted to exchange them for irredeemable Reichsbank notes and Imperial Treasury notes. The Treasury likewise was released from the obligation to redeem its own outstanding notes. To protect the gold reserves of the private note-issuing banks, they were allowed to redeem their notes with Reichsbank notes. Thus all currency became inconvertible.

ii. *Imperial Treasury Notes Issued*

Furthermore, to provide notes of small denominations, government paper money, Reichskassenscheine, was issued in denominations of 5 and 10 marks. As a result of legislation, the war chest of mk. 120 million was doubled by the sale of Imperial Treasury Notes, Reichskassenscheine, for gold. These were made legal tender and their acceptance made compulsory. The original mk. 120 million were authorized April 30, 1874, another 120 million on July 3, 1913, and an additional 120 million on March 22, 1915, the last being fully covered by gold or loan-bureau notes. Like the British currency notes, their object was to provide bills of small denomination.

iii. *Increased Issue of Reichsbank Notes*

The policy of German war finance was to raise large sums of money through the Reichsbank. Under the terms of the banking law notes were issued against cash and bills of exchange in the proportion of one-third and two-thirds. The war policy required an increase of bank notes and to meet the need, new definitions of cover were made. Before the war, cash consisted of gold, silver, and a limited amount of Imperial Treasury notes. To create "cash" the Imperial Treasury note issue was increased and the notes of the loan bureaus, Darlehnskassenscheine, were authorized as equivalent to cash. To meet the demand for bills of exchange as cover for notes, the bank law of March, 1875, which required discounted bills of exchange maturing in three months and bearing two responsible names as guarantors, was modified

by the law of August 4, 1914, which provided that in lieu of commercial bills, which would be available in diminishing volume during the war, the Reichsbank should regard as bills of exchange treasury bills, bearing the signatures of two members of the National Debt office and maturing within three months. In brief, for gold and for commercial bills as cover for notes, there were substituted respectively notes of the loan bureaus and short-term treasury bills. Inflation might thus be unlimited. The Reichsbank was also authorized to buy, sell and discount three-months treasury bills.

The same act likewise repealed for the period of the war the provision for a tax of five per cent per annum upon the uncovered amount of circulating notes above the legal amount, Kontingent. However, the facility in creating cash reserves by issuing loan-bureau notes made this provision almost superfluous.[4]

iv. *New Institutions to Create Credit*

Several types of credit institutions were created for the purpose of liquefying or mobilizing the financial resources of the country. The Reichsbank aided the larger firms and the banks. The loan bureaus, Darlehnskassen, aided the smaller tradesmen or the individuals who possessed any values that might be pledged. Municipal loan bureaus were established to make loans on securities unacceptable at the regular loan bureaus. The rates of interest were higher and a guaranty fund was raised by coöperative societies and the local community. These institutions did not issue notes, but expanded their activities by rediscounting at the Reichsbank and the Kriegskredit banks. The Kriegskredit banks were organized by banks, chambers of commerce and public bodies. These institutions made loans based on unsecured notes and on goods or bills of exchange, which in turn were rediscounted at the Reichsbank. The Kriegskredit banks could not issue notes.

The Darlehnskassen were the outgrowth of the practice of the old Bank of Prussia and of the Lombard department of the Reichsbank (Par. 3, Sec. 13 of Bank Act), of making loans on commodities or on securities. The loan bureaus themselves were actually tried out in Prussia as separate institutions during three

[4] Laws No. 4333, 4434, 4435, 4446, 4448, of the Reichgesetzblatt.

wars, in 1848, in 1866, and in 1870. Similar institutions were established in France in 1830 and 1848 but they had not the privilege of issuing notes. The loan bureaus were under the control of the Reichsbank. Except in rare cases, loans were made for not less than 100 marks in amount and for not more than three months in time. The security might be either non-perishable merchandise stored within Germany on which a loan of 50 per cent was allowed, securities issued by the empire or by a federal state, or securities conforming to specified requirements and issued by corporations within the empire, on which loans of from 60 to 75 per cent were made. According to the law, the rate of interest was not to be higher than the Reichsbank rate for bills. The loan bureau had the right to sell the security and reimburse itself out of the proceeds. The loan was made in the form of loan-bureau notes, Darlehnskassenscheine, which were issued in denominations of 1 mark and upward. They were counted as cash in the reserves of the Reichsbank like gold and imperial treasury notes. Unlike the currency notes of Great Britain or the Bank of France notes, there was no gold cover in back of the German loan-bureau notes. However, if the security should be inadequate to pay the loan when due, the loan bureau had recourse to all the assets of the borrower.

v. *Moratorium*

The liquefaction of the fixed assets of Germany made it unnecessary to declare an official moratorium. However, there is little difference between declaring a moratorium when liquid assets are not available and liquefying fixed assets to avoid a moratorium. England and France followed the former policy and Germany the latter. A moratorium postpones payment directly; the loan bureau postpones ultimate payment indirectly and causes great inflation in addition. A modified moratorium was put into effect on bills and checks falling due after July 31, 1914, which was extended until June 30, 1915. The courts, however, were authorized, as in Great Britain, to extend the time for payment if the inability to pay was due to the war and if the delay did not inflict undue hardship on the creditor. As in Great Britain the courts could stay judgment, in the case of failure to pay rent, interest or

mortgages. These legal processes were made less costly and less involved than the usual court proceedings.[5]

C. Operations of the Reichsbank During the War[6]

The effect of the financial legislation enacted at the beginning of the war was soon reflected in the statements of the Reichsbank. Gold and the metallic reserves increased fairly continuously up to the middle of 1917, fluctuated slightly, reached a high level in the autumn of 1918, and declined sharply after the armistice. The paper-money holdings of the Reichsbank increased slightly up to 1919 and very rapidly thereafter. Government paper, that is treasury bills discounted at the Reichsbank, were included with commercial bills in the weekly statement shortly after the outbreak of the war, and the combined account increased continuously during the war and by very large amounts after the armistice. Before the outbreak of the war the Reichsbank notes were based on gold and commercial bills but since then have been based on Darlehnskassenscheine and treasury bills. Naturally with the increase of treasury bills and of the loan-bureau notes which were turned in to the Reichsbank, its own notes increased correspondingly. The increase was particularly rapid after the armistice. Corresponding to the increased holdings of treasury bills among the assets of the Reichsbank, deposit liabilities increased at a very rapid rate after the armistice.

The important items in the balance sheet of the Reichsbank are as follows:[7]

[5] Going, p. 525.
Mayer, Adolph, Zur Geschichte und Theorie des Moratoriums. Schmollers Jahrbuch, 1916, xxxix, pp. 1789-1856.

[6] Verwaltungsbericht der Reichsbank, 1914-1920. Berlin: Reichsdruckerei.
Statistiches Jahrbuch, section viii, Geld und Kreditwesen, gives cumulative summary of operations.

[7] Paper by Bendix, Ludwig, Commissioner of Foreign Exchange of the Ministry of Commerce, The Reichsbank from the Outbreak of the War to June 30, 1920. A study submitted by Frederick Simpich of the American Mission at Berlin, July 15, 1920.
Also, Raffalovich, M. A., Le Reichsbank en 1918 et 1919. Economiste Français, June 21, 1919, pp. 771, *et seq.*
Also, Monthly statements in Die Bank, Berlin.

STATEMENT OF THE REICHSBANK

(in million marks)

Date	Gold	Paper money*	Commercial bills, checks, treasury bills	Bank notes in circulation	Deposits
1914:					
January 7....	1204	81	1,168	2,303	804
June 30....	1306	60	1,213	2,407	858
July 23....	1357	105	751	1,891	944
July 31....	1253	45	2,081	2,909	1,258
December 31....	2093	880	3,937	5,046	1,757
1915:					
June 30....	2388	514	4,918	5,840	1,799
December 31....	2445	1,291	5,803	6,918	2,359
1916:					
June 30....	2466	634	6,610	7,241	2,371
December 31....	2520	423	9,610	8,055	4,564
1917:					
June 30....	2457	452	10,962	8,699	5,693
December 31....	2407	1,315	14,598	11,468	8,050
1918:					
June 30....	2346	1,787	16,671	12,510	9,181
November 7....	2550	3,190	19,444	16,959	9,326
December 31....	2262	5,270	27,416	22,188	13,280
1919:					
June 30....	1116	9,062	33,293	29,968	13,730
December 31....	1089	11,027	41,745	35,698	17,072
1920:					
March 31....	1091	13,974	44,576	45,170	18,498
June 30....	1092	17,254	50,954	53,975	23,414
December 31....	1092	23,417	60,634	68,806	22,327

*Reichskassenscheine—total issue mk. 360 million, of which 30 millions on the average are kept by the Reichsbank.

Darlehnskassenscheine and banknotes of four note banks (Sachsische Bank, Badensche Bank, Würtembergische Bank, Bayerische Notenbank)—total issue about 250 millions, of which in recent years only 3 millions on an average were kept by the Reichsbank.

FIGURE X

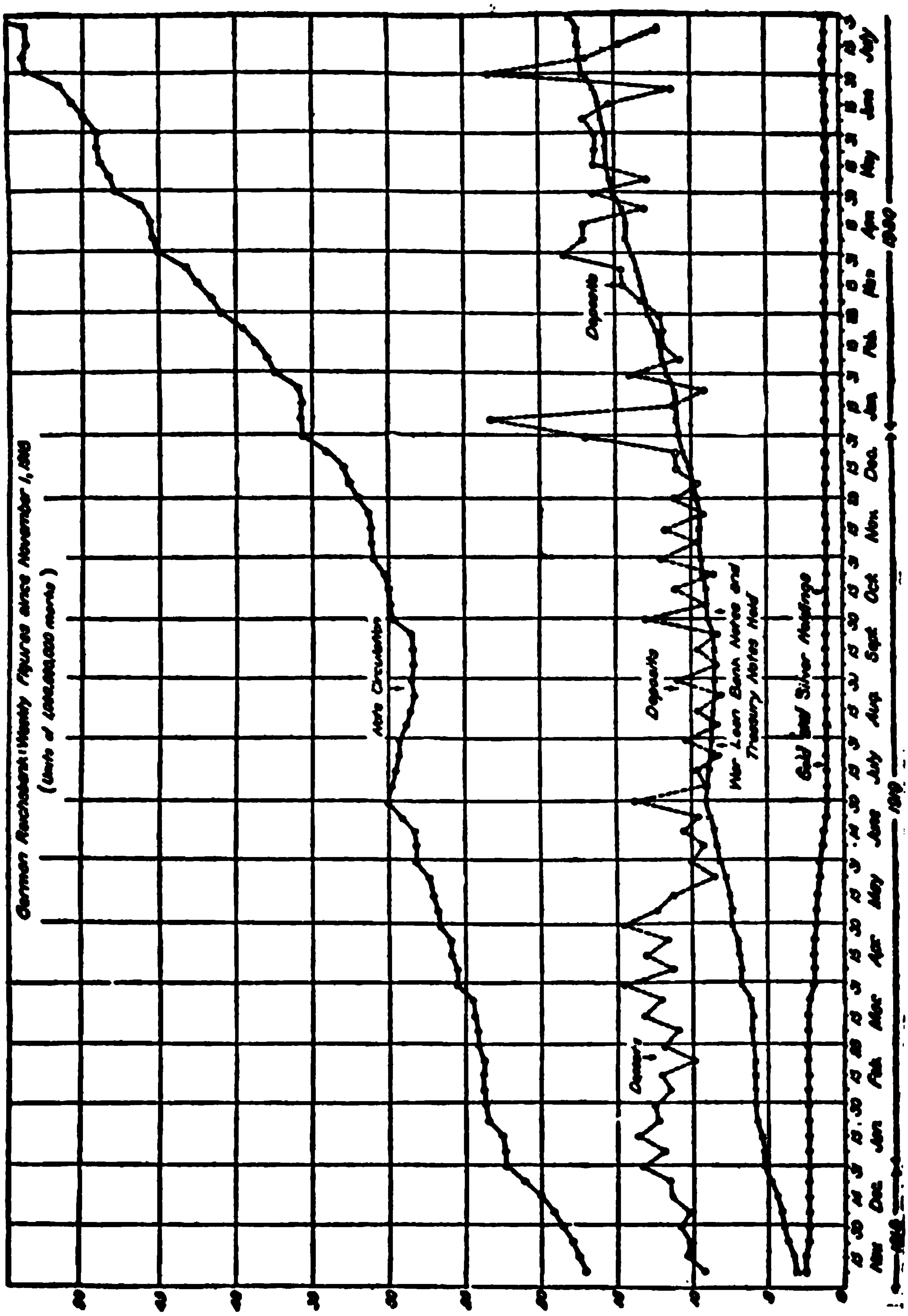

German Reichsbank: Weekly Figures since November 1, 1918
(Units of 1,000,000,000 marks)
Note Circulation
Deposits
Deposits
Deposits
War Loan Bank Notes and Treasury Notes Held
Gold and Silver Holdings

FIGURE XI

The changes in the important items of the balance sheet of the Reichsbank become more evident in the following table showing the relative figures, taking the figures for December 31, 1913, as 100.[8]

RELATIVE FIGURES OF PRINCIPAL ITEMS OF REICHSBANK STATEMENT

Items	Dec. 31, 1913	July 31, 1914	Dec. 31, 1914	Dec. 31, 1915	Dec. 31, 1916	Dec. 31, 1917	Dec. 31, 1918	Aug. 15, 1919	June 30, 1920
Total metallic reserve......	100	106	147	171	175	179	158	78	76
Imperial treasury and loan bank notes............	100	72	1900	2780	910	2,830	11,400	18,600	37,400
Bills, checks and discounted treasury bills...........	100	140	264	389	645	978	1,840	2,020	3,420
Reichsbank notes in circulation.................	100	112	195	267	311	442	856	1,103	2,080

Compared with the figures at the end of 1913, the total metallic reserve at the end of 1917 rose 1.79 times as high as at the end of 1913, but by the middle of 1920 it had declined to 0.76 times the 1913 figure. On the other hand imperial treasury and loan bank notes by 1920 rose to 374.0 times as high, a colossal increase. The item "bills, checks and discounted treasury bills," consisting chiefly of the latter, was 34.20 times as great on June 30, 1920, as at the end of 1913. The Reichsbank notes increased 20.80 times.

The extent to which government paper displaced gold and commercial bills as assets of the Reichsbank may be seen in a comparison of the ratios of the several items to the total assets at the specified dates from the end of 1913 to the middle of 1920. The percentage of metallic reserve to total assets declined from 38.8 per cent at the end of 1913 to 1.3 per cent in the middle of 1920. On the other hand imperial treasury and loan bank notes rose from 1.2 per cent at the end of 1913 to 21.2 per cent of total assets in the middle of 1920. The percentage of bills, checks and discounted treasury bills rose from 40.0 per cent at the end of 1913 to 71.9 per cent of total assets in the middle of 1919 and 62.5 per cent in the middle of 1920. The increase was in discounted treasury bills primarily.

[8] Based on the Reichsbank returns compiled by the Federal Reserve Board from Die Bank, the Deutscher Oekonomist, and the Berliner Boersen-Courier. Federal Reserve Bulletin, October, 1919, and August, 1920.

PERCENTAGE OF TOTAL ASSETS

Items	Dec. 31, 1913	July 31, 1914	Dec. 31, 1914	Dec. 31, 1915	Dec. 31, 1916	Dec. 31, 1917	Dec. 31, 1918	Aug. 15, 1919	June 30, 1920
Metallic reserve	38.8	34.2	29.4	25.0	18.9	12.5	6.1	2.7	1.3
Treasury and loan bank notes	1.2	0.7	12.1	13.0	3.1	6.3	14.0	20.5	21.2
Bills, checks and discounted treasury bills	40.0	46.5	54.5	58.5	71.5	70.5	80.0	71.9	62.5
Ratio metallic reserve to notes, in circulation, per cent	51.7	52.6	42.1	35.9	31.5	22.6	10.3	3.9	2.0

With the metallic reserve increasing slightly through 1918 and declining sharply thereafter, on the one hand, and on the other hand with rapidly increasing note liabilities, the ratio of metallic reserve to notes declined from 51.7 per cent at the end of 1913 to 2.0 per cent in the middle of 1920. If deposit liabilities be included the ratio of metallic reserve to note and deposit liabilities combined fell from 45.2 per cent on June 30 of 1913 to 1.4 per cent on June 30, 1920. Although the loan bureau notes are not part of the liabilities of the Reichsbank they should be included among the liabilities, so as to present a true picture of the credit situation in Germany, in which event the ratio declines to 1.2 per cent.

PERCENTAGE OF METAL TO LIABILITIES

Item	1913	1914	1915	1916	1917	1918	1919	1920
Ratio metallic reserves to notes and deposit liabilities combined, as of June 30 each year	45.2	49.9	31.9	26.0	17.5	11.4	2.6	1.4

i. *Gold Policy of the Reichsbank*

(a) *Changes in Gold Holdings During the War—*

Before the war the gold in Germany was estimated at from mk. 3800 million to mk. 4400 million, of which the Reichsbank held about mk. 1357 million on July 23, 1914. The remaining amount was in circulation. The war fund, amounting to about mk. 205 million, was transferred by the government to the Reichsbank at the beginning of the war. The gold holdings increased up to May, 1917, and declined slightly as a result of gold exports from Germany to pay for food and to maintain German credit in the neighboring neutral countries. Limited quantities were released to the German jewelry trade for export and under the

restriction that the value of the finished article be greatly in excess of the raw gold used. On October 15, 1918, the gold holdings of the Reichsbank rose to a maximum of mk. 2,662,929,000, as a result of incorporating in the statement the Russian gold received under the treaty of Brest-Litovsk. Since the beginning of the war, therefore, the stock of gold at the Reichsbank increased about mk. 1305 million, net.

After the armistice the gold holdings declined very rapidly, owing to payment for food supplies and to settlement of the terms of the armistice. Article 19 of this document provided for the restitution by Germany of Russian and Roumanian gold. This gold was to be delivered in trust to the Allies and held by them subject to terms of the treaty. Furthermore, cash taken from the National Bank of Belgium, as well as other specie and documents, had to be returned. By June 30, 1920, the Reichsbank had lost mk. 1600 million, of which mk. 312,740,000, taken from Soviet Russia, was transferred to Paris.[9]

(b) *War Measures to Increase Gold Holdings*—

To maintain as high a ratio of gold to note and deposit liabilities as possible, the government engaged in a propaganda and enacted legislation to increase the gold supply. Shortly after the outbreak of the war German paper had fallen to a discount in the neighboring neutral countries. On November 23, 1914, the Bundesrat penalized the buying and selling of gold at a premium over paper, prohibited the exportation of gold under the penalty of fine and imprisonment, forbade the publication of rates of foreign exchange, and required holders of safe deposit vaults to sign a statement that they did not hoard gold.

Again, travelers were stopped at the frontiers and gold on their person was exchanged for notes. Privileges were extended to soldiers for collecting gold. The wealthy were required to swear that they possessed no further gold. The clergy preached and the newspapers made appeals to the public. Committees were formed in the towns to collect gold ornaments which were exchanged for notes and which were melted down.[10] In exchange

[9] Commerce Reports, July 8, 1919.

[10] Address of Sir Edward Holden to the stockholders of the London City and Midland Bank, January 26, 1917. See The Statist, January 27, 1917.

for art objects surrendered, the Reichsbank offered engraved copies of the painting of Arthur Kæmpf entitled, "I gave gold for iron—national sacrifice, 1813." German women were asked to turn in their pearls in exchange for notes.

The value of these measures to increase the gold supply is doubtful. The amount of gold collected exceeded the requirements of trade. More gold was in the Reichsbank than under the pre-war system of convertible paper. The accumulation of gold as a reserve for a vast increase of inconvertible notes does strengthen however, the probability of redemption of notes.

ii. *Commercial Bills and Discounted Treasury Bills*

Before the war the Reichsbank's holding of treasury bills was kept separate from the holdings of commercial bills. Discounted treasury bills averaged about mk. 400 million from the beginning of 1914 to the outbreak of the war. In the last week of July, 1914, when war loomed up as a probability, discounting of commercial bills increased suddenly. After the outbreak of the war the commercial bills and treasury bills were merged on the Reichsbank statements, but the item consisted chiefly of government paper. Bendix estimates that commercial bills declined from mk. 2081 million in the last week of July, 1914, to less than mk. 500 million at the end of 1918 and rose again to about mk. 3000 million by the end of June, 1920.

(a) *Intermittent Increases up to the Armistice*—

The total volume of discounts and advances, or commercial bills and discounted treasury bills combined, fluctuated regularly around the end of March and the end of September of each year from the autumn of 1914 to the autumn of 1918, as shown in the table on page 272.

The increase from about mk. 5000 million on August 31, 1914, to about mk. 24,000 million in September, 1918, was intermittent. Discounts and advances increased just before the war loans were floated in March and September of each year, but declined after the loans to a slightly lower level. These fluctuations were due to borrowing by the government in anticipation of the loans. Upon receipt of funds from the sale of bonds, the government redeemed its short-term obligations held by the Reichsbank, causing a marked

decline in this item on the balance sheet of the bank. However, as the war continued, there was a decline in the percentage and amount repaid of the treasury bills held by the Reichsbank; for instance, the decline in the spring of 1918 was only mk. 2146 million as compared with mk. 4991 million in the spring of 1917.

DISCOUNTS AND ADVANCES
(in million marks)

Date	Million marks	Date	Million marks
1914:		1918:	
June 30......	1,285	March 30....	16,034
July 31......	2,283	April 30....	13,888
August 31......	4,855	September 30....	23,830
September 30......	4,786	October 31....	20,679
October 31......	2,809		
		1919:	
1915:		March 31....	30,187
March 31......	6,877	April 30....	31,553
April 30......	3,807	September 30....	33,859
September 30......	7,484	October 31....	34,016
October 30......	4,225		
		1920:	
1916:		March 31....	44,576
March 31......	8,124	June 30....	50,954
April 29......	5,138	September 15....	49,720
September 30......	10,769		
October 31......	7,891		
1917:			
March 31......	13,606		
April 30......	8,715		
September 29......	15,633		
October 23......	11,553		

(b) *Great Increases After the Armistice*—

After the armistice the increase was no longer intermittent; it was continuous. From November, 1918, until June, 1920, the floating debt of the Empire rose from mk. 45,000 million to mk. 117,000 million, and the Reichsbank holdings of commercial bills and treasury bills in the same period rose from mk. 21,000 million to about mk. 51,000 million. This huge increase in 1½ years is in striking contrast to the increase in the previous four years, from about mk. 5000 million on August 31, 1914, to mk. 21,000 million on October 31, 1918. The former increase was twice

as great as the latter. The reason for this continuous increase in the floating debt and in the correspondingly continuous increase in the Reichsbank holdings of treasury bills and of commercial bills was that German government credit had broken down and it was therefore impossible to float a long-time loan, which would partly refund the floating debt. Then again after the armistice the neutral governments refused to extend even short-term credit to Germany. The expenses of demobilization were met by means of treasury bills, and these were not entirely sold to the public but in large part discounted at the Reichsbank. In other words, the Reichsbank carried the floating debt of Germany after the armistice.[11]

iii. *Note Issues*

(a) *Increases by Years*—

The Reichsbank notes in circulation increased continuously after the beginning of the war, except to the extent that there was a very slight decline during the periods of subscriptions to loans. The notes in circulation on July 31, 1914, amounted to mk. 2909 million, and after a fairly continuous rise amounted on October 31, 1918, to mk. 16,661 million, an increase of about mk. 13,000 million.

The increase of notes before the armistice was due to the flooding of the invaded territories with German marks. For instance, in 1917 the ruble in Poland was superseded by the Polish mark, which was made the equivalent of the German mark and which bore the guaranty of the German government of conversion into German marks. In addition to her own notes Germany guaranteed the redemption of mk. 760 million of Loan Office notes circulated by the Loan Office of the East, as well as mk. 800 million of Polish Loan Office notes and mk. 400 million of notes issued in the Ukraine as well as the mark notes issued in the French and Belgian territories invaded. The Belgian mark notes amounting to mk. 5500 million were refunded by German bonds payable in 20 years and bearing 5 per cent interest beginning May, 1921.[12]

[11] The 1918 report of the Reichsbank. See also Federal Reserve Bulletin, May, 1919.

[12] Commerce Reports, February 2, 1920.

Owing to the inability to raise funds through loans after the armistice, notes in circulation rose by leaps and bounds to a level of mk. 53,975 million on June 30, 1920, an increase in that time of mk. 37,000 million. The rate of increase during 1915 was about 37 per cent; during 1916, 17 per cent; during 1917, 42 per cent; during 1918, 106 per cent; during 1919, 61 per cent and during the first half of 1920 51 per cent. The increase after June, 1920, was at a growing rate, the increase during July and August being about mk. 5000 million. The total notes of all kinds in circulation on August 31, 1920, amounted to mk. 72,000 million, of which mk. 58,000 million were Reichsbank notes. By the end of September, 1921, the note circulation rose to mk. 86,384 million. Concurrent with the increase of paper money the gold reserves declined from mk. 2550 million on November 7, 1918 to mk. 1092 million on June 30, 1920, because of payments for food imports.

(b) *Analysis of Total Notes in Circulation*—

The total note circulation on August 31, 1920, amounted to over mk. 72,000 million, of which the largest part consisted of Reichsbank notes, a substantial portion of Loan Bureau notes, and relatively small sums of treasury notes and private bank notes. The distribution is shown herewith:

Analysis of Note Circulation
(in million marks)

	Amount	Per cent
Reichsbank notes	58,401	80.9
Government treasury notes (*Reichskassenscheine*)	315	0.4
Loan bureau notes (*Darlehnskassenscheine*)	13,266	18.4
Private bank notes	240	0.3
Total	72,222	100.0

However not all of this paper money is in actual circulation in Germany The amount held in Belgium is about mk. 6000 million and in France about mk. 4000 million, and other large amounts were bought and held on speculative account in the neutral countries of Europe as well as in North and South America. Bendix estimates that mk. 20,000 million are held outside of Germany and

that another mk. 9000 million are hoarded by the population in the attempt to evade the drastic taxes.

(c) *The Causes of the Increase in Note Circulation*—

A prime cause for the increase in note circulation was the policy of financing the war by loans. Other less fundamental causes appeared from time to time. During the month preceding the armistice, when the military collapse of Germany was impending, the public became panicky and entertained fears as to the solvency of the banks and even as to the possibility of a moratorium. Therefore, they withdrew their deposits from commercial and savings banks and hoarded the paper. In the month from September 24 to October 23, 1918, the total note circulation increased by mk. 2652 million as against one-quarter that figure in the corresponding period in 1917. Another cause of increases in notes issued which became effective in 1919 was legislation requiring banks to reveal their clients' holdings of stock and bonds. This measure caused heavy selling of securities and the hoarding of paper money. Again the levy on capital was an incentive to wealthy people to convert their taxable goods into a form that was less liable to detection. Then again the so-called "hole in the west," the occupied territory, was not controlled by the German customhouses and the large volume of imports paid for in German paper money caused an artificial shortage in Germany proper. During 1919 and 1920 notes were issued to pay for reparation in France and for reimbursement of owners of property taken by Germany. Low discount rates made inflation possible.

(d) *Measures for Relieving the Lack of Currency* [13]—

1. NOTE ISSUES BY TOWNS AND CHAMBERS OF COMMERCE—When the shortage in currency became acute the local communities undertook to supply the deficiency. For instance Hamburg and many other German towns issued 50-pfennig notes.[14] By the autumn of 1917 over 50 municipalities had availed themselves of the right to issue emergency paper money. These issues became very extensive and the imperial authorities attempted to check the practice by requiring that against any such issue a balance of equal

[13] Address of Herr Havenstein, President of the Reichsbank, published in the Frankfurter Zeitung, October 31, 1918.

[14] London Economist, April 28, 1917.

Figure X

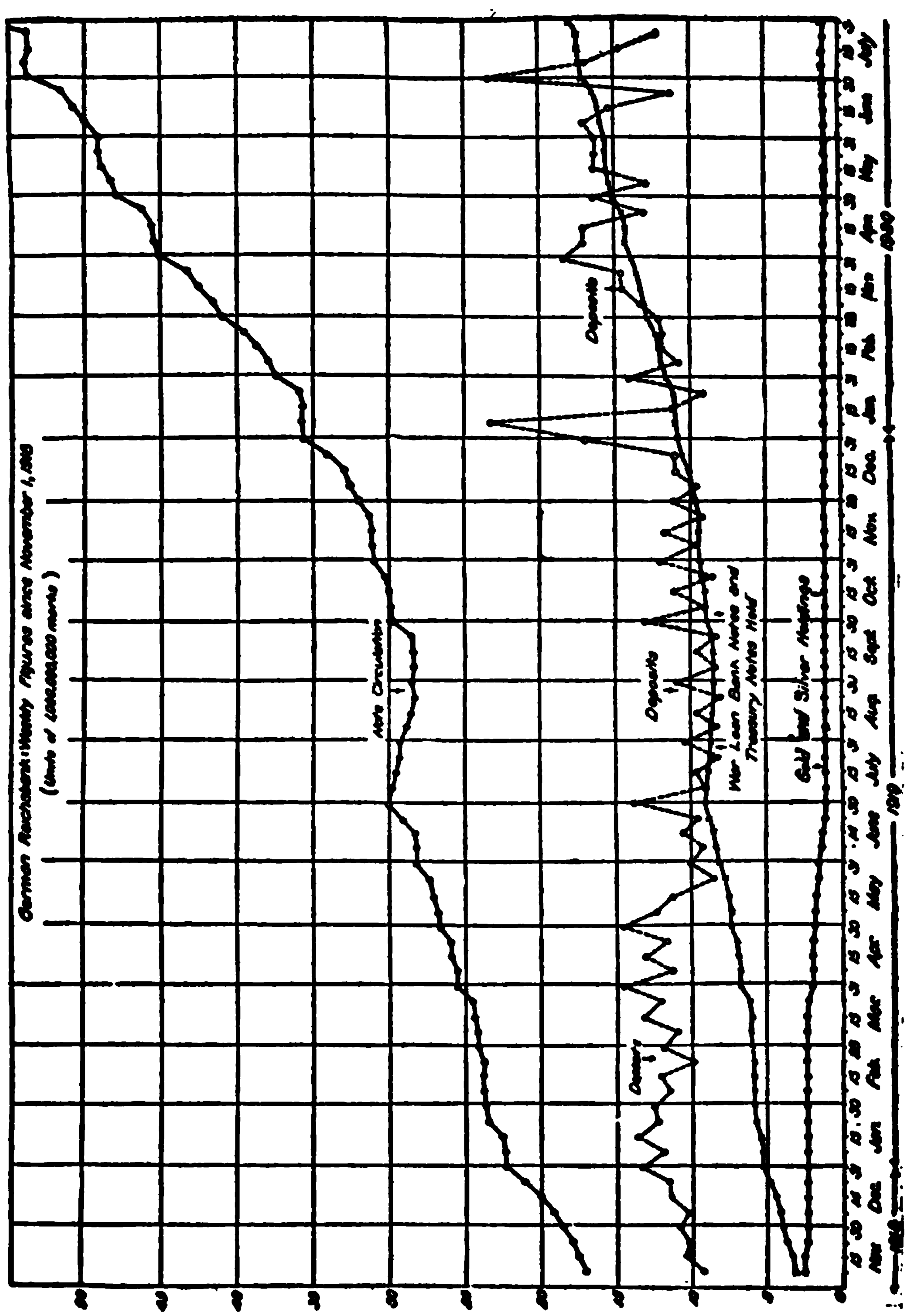

German Reichsbank: Weekly Figures since November 1, 1918
(Units of 1,000,000,000 marks)
Note Circulation
Deposits
Deposits
Deposits
War Loan Bank Notes and Treasury Notes Held
Gold and Silver Holdings

FIGURE XI

LOAN BUREAU NOTES [21]
(in million marks)

Date	Total issue	Circulation *	Date	Total issue	Circulation
1914:			1918:		
January 7....	....	....	June 30...	9,474	7,582
June 30....	....	....	November 7...	12,911	9,518
July 23....	....	....	December 31...	15,626	10,109
July 31....	....	....			
December 31....	1,317	446	1919:		
			June 30...	20,889	12,027
1915:			December 31...	24,895	13,781
June 30....	1,258	705			
December 31....	2,347	972	1920:		
			March 31...	27,787	13,731
1916:			June 23...	29,857	13,285
June 30....	2,033	1,316	June 30...	30,947	13,633
December 31....	3,408	2,873			
1917:					
June 30....	5,076	4,521			
December 31....	7,689	6,265			

*Amount held by the Reichsbank deducted.

(f) *Imperial Treasury Notes, Reichskassenscheine*—

In addition to the notes of the Reichsbank and of the loan bureaus the total note circulation included mk. 360 million of imperial treasury notes, the origin and increase of which were referred to above. Furthermore the four private banks that retained the privilege of note issue had about mk. 352 million in circulation. Finally, the municipalities and communities issued about mk. 200 million of emergency paper, particularly in small denominations.

iv. *Deposits*

The statements of the Reichsbank since the beginning of the war, shown above, present a clear picture of the increase in deposits. Up to the time of the signing of the armistice deposits increased mk. 8068 million above the amount outstanding on July 31, 1914. This is approximately a rate of increase of mk. 2000 million a year. In the 1½ years approximately between the date of the

[21] From the Bendix memorandum.

armistice and June 30, 1920, deposits increased mk. 14,088 million, a growth at the rate of about mk. 9000 million a year. The increase of course was due to the fact that the government rediscounted large quantities of Treasury bills at the Reichsbank.

D. Effects of Inflation

There are many indicators of the effects of inflation: A premium on gold at home, or if this is illegal the disappearance of hard money, the rise of foreign exchange rates, a rise in prices, and an increase of profits of industry and banks.

1. *Depreciation of Currency*

In the early stages of the war a premium on gold was offered, but was made illegal by war legislation.[22] However, the working out of economic laws was inevitable. The court records show prosecutions for trading in gold. In fact, the prohibition on the free exchange of paper and gold caused greater depreciation of German paper money within Germany than in the neighboring neutral countries. That is in the spring of 1918, 1 gold mark was equivalent to 3 paper marks in Germany, but to only 2 paper marks abroad. The prohibition on offering or accepting a premium on gold within Germany resulted in the exportation of gold in order to obtain the premium abroad. The prohibition on the free exchange of paper and gold likewise resulted in the disappearance of gold and silver in circulation and in the need for the substitution by iron, zinc and aluminum coins.

Eventually the discount on paper money was officially recognized; the government decreed in November, 1919, that 100 gold marks were to be the equivalent of 475 paper marks in the payment of import duties, a discount of approximately 79 per cent on paper. The Reichsbank likewise officially recognized the depreciation of paper in terms of silver, the ratio being 1 mark silver to 8 marks of paper.[22a] Of course the relatively slight rise in the price of silver affected the ratio. Again, the German Minister of Public Works in the summer of 1919 fixed prices at which foreign gold coins should be accepted by the German railways.

[22] Going, p. 543.
[22a] Vorwärts, Feb. 13, 1920.

The British sovereign which at parity was equal to 20.43 marks was fixed at 51.05 marks; 10 Dutch florins, which at parity were equal to 16.88 marks, were fixed at 42.15 marks; and the American dollar, at parity 4.2 marks, was fixed at 10.45 marks. The depreciation of gold was evident early in the war, particularly in trade with the neutrals. Large shipments which were sold on a gold basis were held up on the German frontier by the Dutch authorities because paper money was tendered in payment.[23]

The prohibition on the free exchange of depreciated paper for gold led to a peculiar phenomenon during the war, particularly in the spring of 1918. In the neutral countries, American paper money was bought up by Germany at rates more favorable than the equivalent of the American dollar exchange in the neutral markets.

ii. *Rise in Prices*[24]

(a) *Course of Rise*—

Until 1920 there was available neither an official nor a standard index of commodity prices in Germany. But the course of prices during the war can be obtained from the "standard food budget" compiled by Calwer from the average of official maximum prices for about 200 localities and based on the peace-time ration of the seamen of the German navy, but calculated for a family of four persons.

	1913, marks	1914, marks	1915, marks	1916, marks	1917, marks	1918, marks	1919, marks
April	25.61	24.96	34.41	51.78	54.81	57.13	69.65
August	.....	26.41	39.13	53.53	54.67	59.43	85.45
Relative figures based on April, 1913, as 100							
April	100	97	134	202	214	223	272
August	.....	103	152	209	213	232	334

[23] New York Times, August 15, 1917.

[24] Englander, Oskar, Fragen des Preises, Schmollers Jahrbuch, 1919, xliii, pp. 933-981, and 1395-1458. A study of price theories.

Statistisches Jahrbuch fur das Deutsche Reich, section ix, Preise, gives record of prices for ten years for a great number of commodities.

Vierteljahreshefte zur Statistik des Deutschen Reichs, gives the monthly average prices of important commodities.

These official maximum prices, however, do not represent the entire rise. There was illicit trading at higher prices and uncontrolled prices also entered into the cost of living. Furthermore, after 1919, during the period of vast increases in the note circulation outstanding, prices rose more rapidly than during the war. Until August, 1918, prices had risen to only 2.3 times the prewar level, but in the following year the increase was almost as great as in the entire four years preceding.[25]

The rise in the price of raw materials was much more rapid after the armistice and in response to the inflation of the currency. The figures in marks per ton of hematite iron ore were as follows.[26]

	1914	Nov. 1, 1919	Dec. 1, 1919	Jan. 1, 1920	Feb. 1, 1920
Actual price	79.50	573.50	1171.50	1718.50	2227.50
Relative	100	725	2470	2160	2800

The price of the best Ruhr coal (nut size) in marks per ton likewise rose more rapidly during the period of great increase of circulation, as follows:

	1914	Oct., 1919	Dec., 1919	Jan., 1920	Feb., 1920
Actual price	13	86	97	118	160
Relative	100	665	745	910	1230

(b) *Extent of the Rise*—

From 1914 to 1920 the average increase of living expenses was over sixteenfold.[27] The item showing the largest increase was eggs, the price of which in 1920 was 32 times the 1914 price. The smallest increase was in house rents which rose only 20 per cent, owing to the maximum allowance set by law. Carfares also

[25] From the Deutscher Reichsanzeiger (Berlin), December 19, 1919. Reprinted in the U. S. Labor Review, April, 1920.

[26] Berlin correspondence, London Economist, February 14, 1920. For additional information on prices see British Board of Trade Journal, October 3, 1918, and Commerce Reports, December 30, 1918.

[27] Compiled by the American Association of Commerce and Trade in Berlin. See also the Bavarian Statistical Year Book for 1919, abstracted in the Monthly Labor Review, April, 1920.

showed a moderate increase of only 600 per cent. The imported commodities, such as cloth and clothing, shoes and meat, showed the largest increase. The table is given herewith:

Commodities	1914, Marks	1920, Marks	Ratio 1920 to 1914 prices, in per cent
Food:			
Potatoes, 10 lb.	0.30	4.00	1333
Butter, per lb.	1.25	17.00	1360
Eggs, per doz.	0.65	21.00	3230
Meat per lb. (average between pork and beef)	1.00	24.00	2400
Common vegetables (average between various kinds of vegetables)	0.25	4.00	1600
Bread (1-lb. loaf)	0.45	4.50	1000
Coal (brickets) per cwt.	1.00	23.50	2350
Clothing:			
Men's suits, ready-made	60.00	1300.00	2100
Men's suits, tailor-made	80.00	2000.00	2500
Men's shoes	12.50	300.00	2500
Cloth for women's clothes, per meter	7.50	175.00	2330
Cloth for women's clothes, muslin, per meter	2.50	39.00	1560
Carfare	0.10	0.70	700
Rent:			
Apartment of five rooms per month	125.00	150.00	120
Amusements:			
Theater	1.50	8.00	533
Moving pictures	0.50	2.00	400
Average of living expenses	......	......	1620

The increase during 1920, according to the index number of the Frankfurter Zeitung, was as follows:

January	100
March	147
June	149
September	144
December	156

(c) *The Lag in Wages and Cost-of-Living Subsidies*—

The rise in the cost of living was followed naturally by a rise in wages. However, these lagged far behind. For instance the wages of a cabinetmaker rose from about mk. 43 per week in

1913 to mk. 336 per week in 1920, or about 7.8 times. In the several trades, the wages of unskilled labor increased to a greater extent than did those of the artisan, whereas clerical help increased least of all. The table for a few trades is given herewith.[28]

Tradesman	1913, 9-hour day	1920, 8-hour day	Ratio 1920 to to 1913
Cabinetmaker	43.20	336	7.8
Plumber	40.50	220	5.4
Electrician	39.15	204	5.2
Typesetter	37.00	230	6.2
Bricklayer	44.28	216	4.9
Unskiller labor	30.78	206	6.7
Conductor, street railway	30.00	218	7.3
Laborer	20.50	206	10.0
Clerk, bookkeeper, stenographer	40.00	190	4.8

The great gap between the rise in commodity prices and the rise in wages caused a hardship on the poor. An investigation conducted by the German Bureau of Labor Statistics [29] shows that the deficits in family budgets, which at first had affected only the poorer classes, later on also affected the moderately well-to-do, whose incomes were relatively reduced by the rise in prices resulting from inflation. The average monthly deficit per person employed was mk. 20.30 in the families of laborers and mk. 49.33 in the families of government clerks. To meet these deficits the government authorized the granting of subsidies. In 1919 mk. 3000 million [30] were devoted to food subsidies. This was equivalent to 50 marks per annum per head of the population. How pitifully inadequate this must have been can be seen by comparing this subsidy of mk. 50 per head per annum with the actual budget deficit of mk. 49 per worker per month. The policy of subsidizing must fail because out of the total increase in note circulation, which causes a rise in prices, only a small fraction can be devoted to the granting of subsidies, whose object is to overcome the entire rise in so far as it affects the poor.

[28] American Association of Commerce and Trade in Berlin, *ibid.*

[29] Statistisches Reichsamt, Abteilung fur Arbeiterstatistik. Beitrage zur Kenntnis der Lebenshaltung im vierten Kriegsjahre (21. Sonderheft zum Reichs-Arbeitsblatt). Berlin, 1919.

Reprinted in U. S. Labor Review, January, 1920.

[30] Berlin correspondence, Journal of Commerce, April 12, 1920.

iii. *The Increase of Deposits and Profits*

a. *The Reichsbank turnover and profits*—Perhaps the most direct effect of inflation is to be noted in the turnover of the Reichsbank. In 1913 this figure amounted to mk. 422 billion, in 1916 it reached 1000 billion, in 1917 it exceeded 1313 billion, and in 1918 the total turnover of the Reichsbank was 3343 billion, an increase to almost ninefold the 1913 figurre. Correspondingly the total gross profits likewise increased from 133 million marks in 1914, to 273 million in 1915, 326 million in 1916, 365 million in 1917, and 814 million in 1918. The largest part of this profit consisted of profits on bills, checks and imperial government bonds.[31]

b. *The effect on the private banks*—The effects of inflation are evident from a study of the balance sheets of the eight leading banks of Germany.

CONSOLIDATED STATEMENT OF EIGHT [32] LEADING BANKS OF GERMANY, AS OF DECEMBER 31 OF EACH YEAR

(in million marks)

Items	1913	1914	1915	1916	1917	1918	1919
ASSETS:							
Cash, coupons, foreign gold, and balance with banks of issue and clearing	355	577	736	863	1,265	1,423	2,540
Bills, including treasury bills	1766	1819	2493	3,961	7,152	11,281	23,097
Due from banks	308	337	410	635	1,346	1,073	3,574
Stock exchange loans and advances	794	741	894	1,334	1,828	1,986	1,605
Advances on merchandise	510	175	210	262	215	115	851
Securities owned	402	437	443	441	578	791	587
Syndicate participations	336	337	308	267	238	246	242
Participations in banks and banking firms	272	357	360	351	354	368	359
Debits in current account	2853	3232	3313	3,394	4,536	4,694	9,274
Sundry assets	147	181	187	192	211	223	233
Total	7743	8193	9354	11,700	17,723	22,200	42,362
LIABILITIES							
Capital paid in	1105	1255	1255	1,255	1,350	1,350	1,350
Surplus and reserve	360	457	457	461	540	547	553
Credits in current account	4804	5321	6856	9,396	15,210	19,696	39,140
Acceptances and checks	1309	1016	612	385	397	359	958
Sundry liabilities	165	144	174	203	226	248	361
Total	7743	8193	9354	11,700	17,723	22,200	42,362

[31] Deutscher Allgemeine Zeitung, March 31, 1919, reprinted in Commerce Reports, July 8, 1919.

[32] Federal Reserve Bulletin, October, 1920. The banks are Deutsche Bank, Disconto-Gesellschaft in Berlin, Dresdner Bank, Bank für Handel und Industrie (Darmstadter Bank), Commerz- und Disconto-Bank, Berliner Handelsgesellschaft, Nationalbank für Deutschland and Mitteldeutsche Creditbank.

A comparison of the consolidated balance sheets for these eight banks as of the end of the years 1913 to 1919 shows an increase of cash of sevenfold, an increase of bills, including treasury bills, of over thirteenfold, an increase of the item "Due from banks" of about twelvefold, and lesser increases in the items, "Debits in current account," "Credits in current account," and "Total assets or liabilities." The capital increases were slight, about 20 per cent. Advances on merchandise among the debits, and acceptances and checks among the credits, decreased through 1918, as was to be expected, owing to the displacement of commercial credit by government financing. However, in 1919 both these items showed a marked increase.

The foregoing table gives the items in million marks. The changes in the statements of these banks become more evident if the relative figures based on 1913 returns as 100 are given:

RELATIVE FIGURES IN CONSOLIDATED STATEMENT OF EIGHT LEADING BANKS (1913 figures = 100)

Items	1913	1914	1915	1916	1917	1918	1919
Cash	100	163	208	243	356	401	719
Bills, including treasury bills	100	103	141	224	405	639	1309
Due from banks	100	109	133	206	437	348	1160
Debits in current amount	100	113	116	119	159	165	325
Capital paid in	100	113	113	113	122	122	122
Credits in current account	100	111	142	195	316	410	815
Acceptances and checks	100	78	47	29	30	27	73
Total assets or liabilities	100	106	121	151	229	287	547

As in the Reichsbank statement it is difficult to trace the extent to which government paper displaced commercial paper among the assets of the private banks because they too merged commercial bills with treasury bills. Since the combined item consisted chiefly of treasury bills, the ratio of bills to total assets would indicate the extent to which government paper became the chief resource of the banks.

Item	1913	1914	1915	1916	1917	1918	1919
Percentage of bills to total assets at end of year	22.8	22.2	26.7	33.9	40.3	50.3	56.6

c. *Increase of savings banks deposits*—During the war, with the ever-increasing flood of paper money, and with the diminishing supplies of commodities available for purchase (and most of these rationed and sold at fixed prices) the deposits of the savings banks increased by leaps and bounds. The combined German savings banks showed net increases in deposits of mk. 1121 million in 1914, 2541 million in 1915, 2660 million in 1916, and 4160 million in 1917, or taking the 1914 returns as a basis of 100 the deposits in 1915 were 2.26 times as great, in 1916 2.37 times and in 1917 3.70 times as great as in 1914.

In Berlin many new branches of the savings banks had to be opened to accommodate the increasing number of depositors. During the year 1918 the total deposits in 48 of the leading savings banks, showed an increase of about 34 per cent, although the number of depositors had increased only 10 per cent.[33]

d. *Increased profits in industry*—Along with the rise in prices, profits in industry increased very largely. True, they were paper profits and in contrast with the prices of imported raw materials, the fictitious character of paper profits became apparent. For instance the General Electric Co. of Germany, whose paid-up capital stock was mk. 200 million, had to purchase copper amounting to mk. 2 million daily, so that a 100-day supply of copper was equivalent to the total capitalization of the company. That is, a sum supposed to be sufficient to build the entire plant could hardly purchase a three-months' supply of one raw material.[34]

Furthermore, the large increases in capitalization which were necessary to maintain adequate working capital under rising prices, worked an injustice to the original shareholders who paid in gold marks. However, this difficulty was circumvented by offering to the existing shareholders the right to subscribe to new stock.

The rise in profits was reflected in the rise in dividends. The Phoenix Mining & Smelting Works raised its dividend from 10 per cent in 1913 to 20 per cent in 1918. The Deutsch-Luxembourg Mining and Smelting Co., which paid no dividend in 1913, paid 10 per cent in 1918. The United Koenigs & Laura Smelting Co. raised its dividend from 4 per cent in 1913 to 12 per cent in

[33] Sozial Praxis, January 17, 1918; Die Konjunktur, February 21, 1918. Report on German savings banks in Die Sparkasse, reprinted in Commerce Reports, April 15, 1919.

[34] Geneva correspondence, New York Evening Post, January 17, 1920.

1918. The Mannesmann Tubing Works dividend rose from 7½ per cent in 1913 to 18 per cent in 1918, and the Gas Motor Manufacturing Co. from 5 per cent in 1913 to 10 per cent in 1918.[35]

E. The Outlook

It is difficult to speak definitely of Germany's financial outlook in view of the many uncertain factors that affect it. A few things, however, may be said fairly certainly. The recommendations of the Cunliffe Committee in Great Britain certainly cannot apply to Germany. Whereas gradual deflation is practicable for Great Britain and perhaps even for France and for Belgium, in Germany something less time-consuming and more drastic may have to be put into effect.

i. *Gradual Deflation Not Feasible*[36]

In view of the fact that America is a free gold market, the dollar may be taken as the equivalent of gold and therefore exchange rates on the United States reflect approximately the degree of depreciation of the European currencies. Germany, like most of the countries of central Europe, is suffering from a depreciation of over 90 per cent.

The demand exchange rates on November 11, 1920, were as follows:

Country	Parity. Cents	Demand rate. Cents
Germany	23.8	1.13
Finland	23.8	2.19
Poland	23.8	0.24
Austria	20.3	0.28
Czecho-Slovakia	20.3	1.01
Hungary	20.3	0.18
Jugoslavia	20.3	0.70
Roumania	19.3	1.45
Servia	19.3	2.74

[35] Wirtschaftsdienst, December 13, 1918.

[36] Schaefer, Karl U., Die legale Devaluation, Schmollers Jahrbuch, 1919, xliii, pp. 1458-1475, a study of pros and cons of deflation and revaluation.

These weak countries, of which Germany is the most important, cannot deflate their currency and hope to bring it back to parity. Of themselves and without a vigorous fiscal policy these currencies will not become stable. Even with a vigorous fiscal policy and at the rate of economic progress, before the war, deflation from the present levels would take more than a generation.

With its vast untouched resources and its huge tides of immigration after the Civil War the United States required 15 years to deflate a paper currency which at its lowest (in 1864), was quoted at 38.7 per cent of the value of gold, but which rapidly rose in 1865 to 46.3 and in 1866 to 66.0 at the "low" quotation.[37]

The weak countries of Europe listed above show a far greater depreciation of paper with respect to gold, and worse still instead of showing an improvement after the war as the United States did in 1865 and 1866, these countries have further inflated their currency and suffered further declines in their exchanges. In none of these countries is it likely that the currency will recover its pre-war parity within a generation, if at all.

Furthermore, whatever injustice and suffering inflation has wrought is a matter of the past. A process of deflation would mean a long period of declining prices, of severe taxes, of repressed industry, and of general stagnation. Finally, the foreign holdings of a large part of the floating debt of most of these countries will tend to repress any rise in the price of paper money in terms of gold. As paper money increases in value, and correspondingly as the exchanges improve, the foreign holders will sell for profit and depress the exchanges. August Mueller, former Minister of Economics, is the authority for the statement that Germany's debt of about mk. 230 billion is probably redeemable at the present low value of the mark, but never if the mark recovers even half its former value.[38] Deflation will mean the enriching of the foreign speculator at the expense of the recuperative possibilities of the industries.

ii. *The Position Under Depreciated Paper*

The attempt to dispense with gold as a regulator of commercial and financial values is infeasible, if not impossible. The absence of

[37] Mitchell, Sound Currency, vol. 3, No. 17.
[38] Berliner Abendblatt, April 24, 1920.

gold in international settlements of Germany with other countries would mean wide fluctuations of exchanges, with all the unsettling effects on industry. It would also discourage loans to Germany, even of short maturity, because of the likelihood of violent changes between the dates of the loan and the date of its repayment, and finally, without gold as the governor and regulator of the volume of paper money, the temptation to overissue is fatal. Few governments have been able to resist it.[39]

iii. *Internal Measures as Remedies*

The first essential for a stabilization of Germany's finances, is the refunding by means of foreign loans of the floating debt held outside of Germany. Until this is done, the exchange rate of Germany will be depressed below its inherent value, because of the continuous selling pressure exerted on the mark when it rises in response to an improvement in the finances of Germany. The inducement to the present holders of German currency and of German short-term bills to fund their holdings is a likelihood of a rise in German exchange and a profit upon the redemption of the long-term loan.

However, international trade requires that gold act as a corrective and as a stabilizer. Fiat money may do in internal commerce but international commerce requires a medium current everywhere, and gold alone is such a medium. Yet the chief requirement for the restoration of gold as a governor is a revaluation of the mark. What effect this may have is evident from the analogous situation in France 100 years ago. When the *mandats,* which had replaced the *assignats,* were given currency at their quoted gold value by the decree of the French National Assembly on July 16, 1796, there was a noticeable improvement in the financial condition of the country. Specie, which had been in hiding, immediately reappeared in circulation. Goods and commodities being very cheap were exported in great quantities, the exchanges immediately turned in favor of France, and within a short time the metallic currency was restored.[40]

The adoption of a new parity would mean a capital tax on the

[39] Kann, Herbert, Gold oder Papier, Europaeische Staats-und-Wirtschafts Zeitung, September, 1917.

[40] MacLeod, *ibid.*

holders of securities and of property bought at pre-war gold values, and while it may be unjust it is the shortest road to the restoration of financial health.

iv. *Allies' Policies as Remedies*

In addition to the factors within her control the restoration of Germany depends on many conditions beyond her control, such as the recognition of the economic difficulties in the peace treaty, the amelioration of the terms of peace to enable Germany to pay the indemnity, the extension of credits to Germany by the neutral countries producing raw materials secured perhaps by the German properties seized by the enemy during the war or else by a lien prior to all other claims, including reparation and indemnity claims, much the same as receivers' certificates of a corporation, and finally the restoration of trade with Russia and the reëstablishment of the economic unity which prevailed in Europe before the war. These are but a few of the economic elements which condition the future of Germany, and make a categorical prediction as to her future futile.

Part Three

FOREIGN EXCHANGE

CHAPTER IX

PRINCIPLES AND PRACTICE IN THE WORLD WAR[1]

The presentation of the movement of the foreign exchanges in the United States, during and after the war, is, for several reasons, an essential part of a study in international finance.

The exchange rates on the United States reflect the financial condition of the European countries, which constitutes the object of our study. Furthermore, the stabilization of the Allied exchanges during the war was made possible by the vast loans of the United States government to the Allies. Finally, because the United States has been a free gold market except during the period of hostilities, the exchanges quoted in New York are at their gold value.

A. The Theory of Foreign Exchange

i. *Determinants of Exchange Rates*

Exchange rates are determined by the supply of and demand for drafts between countries. If the merchants of one country have an oversupply of bills drawn on another country, the exchange rates of the second country will decline. Before the nineteenth century, such an oversupply arose mainly from an excess of commodity exports. The chief means of liquidating bills in excess of demands of trade was by the shipment of gold. When gold and merchandise were the chief determinants of exchange rates, exports were encouraged as a means of increasing the gold supply of a country. Under the mercantile system, an excess of commodity exports was

[1] See Le Problème des Changes chez les Belligérants, Rapport Générale, Chambre, 1919, No. 6158, part of the report on the budget of France.

regarded as an index of prosperity. In the relatively restricted economic life of that period, an excess of exports was regarded as a favorable balance of trade.

As life has become more mobile, the traffic between nations has come to include categories other than goods. Although the movement of merchandise constitutes the chief source of supply of bills, other important factors are the flow of capital between countries and the performance of services. In modern times the mercantile theory is discarded. The modern view of international trade is, that exports constitute the surplus of goods which it is economical to produce and to exchange for goods which can be produced more cheaply by other countries. There are more means than one for settling an excess of exports or of imports. A nice balance of merchandise imports and exports is no longer regarded as being so important as the mercantilists thought.

Some countries have a continuous excess of imports, which is balanced by interest due on foreign loans, as in England, or by borrowings abroad, as in some of the Latin American countries before the war. On the other hand, some countries have a continuous excess of exports, which is applied to the settlement of interest owed or of loans maturing. Other factors comprised in the international balance of debits and credits are the flow of capital arising out of expenditures of travelers, for pleasure, study, or business, out of remittances and gifts between immigrants and their friends and families. Foreign drafts also arise from the rendering of international services, such as shipping, insurance, banking and brokerage. Whatever the source of the debt, drafts arising therefrom have the same effect as drafts based on movement of commodities.

(a) *Commodity Movements*—

In general the older countries of Europe, such as England, France, Germany, and Switzerland, have an excess of imports and the younger countries such as Russia, the United States, British India, and Argentina have an excess of exports. During the early history of a developing country, while it borrows money abroad, it has an excess of imports. Subsequently, it develops an excess of exports to pay the interest and principal on its foreign loans. Finally, when it has attained industrial maturity and liquidated its indebtedness abroad, it may invest its surplus funds. As the

interest due to it accumulates, it develops an excess of imports. Examples of this development may be found in the statistics of international trade prior to the war or in the industrial history of the older countries.

(b) *The Flow of Capital*—

The movement of funds between the nations is the second principal factor affecting exchange rates. When a country borrows, it obtains a supply of bills upon the lending country, just as if the borrower had exported goods to the lender. During the life of the loan, only the interest payments affect exchange rates. The lender receives annually a supply of bills on the borrower, which tend to depress the exchange rate of the borrower and to raise the exchange rates of the lender. In the meantime, the principal has no effect on the exchanges. When the loan matures, the payment of the principal has a similar effect as the payment of interest. It may seem strange that borrowing should have the effect of an increase of commodity exports. However, this principle is continually applied in normal times. When the exchange rates of a country fall owing to an excess of imports, the central bank raises its interest rate to attract foreign funds. By borrowing, a country may temporarily correct an adverse exchange rate, resulting from an excess of imports. On the other hand, the rise of the exchange rate above the gold parity, as a result of an excess of exports may be corrected by lending money abroad. The central bank attains this end by reducing its interest rate.

Finance bills are short-term loans, issued by bankers at a period of the year when there are insufficient export bills available. At a later season of the year, when exports increase, the finance bills are paid off out of the proceeds of commercial bills. The finance bill resembles an accommodation note in its function in that in both cases a person makes a loan without paying cash. Like the short seller who buys later, the issuer of finance bills liquidates by buying.

(c) *Remittances of Funds*—

Remittances sent to a country tend to raise its exchange rate. The vast sums sent to Italy by immigrants or taken back with them either seasonally or upon their final return to their native land constituted an important item in the Italian trade balance. Simi-

larly, the expenditure of tourists, of business men, and of students aided in the maintenance of the exchanges of those European countries which had no large investments abroad or performed none of the international services such as shipping or banking. France, Italy and Switzerland derived considerable funds from these sources.

(d) *Drafts for Services Performed*—

Services performed for other nations are equivalent to exports of commodities in their effect on exchange rates. Shipping, jobbing, insurance and banking, carried on by the nationals of Great Britain have made it possible for her to have an excess of imports. Norway derived an income of about 220 million kroner in 1913 from her shipping and her excess of imports amounted to about 160 million kroner.

The development of an American merchant marine, or American insurance facilities, and the popularization of the dollar draft internationally will furnish the United States with international credits in addition to its commodity exports. In fact, these three services, in addition to the annual interest accruing to the United States, will probably cause ultimately a decline of exports or an increase of imports and a net excess of imports.

(e) *Summary*—

A country's demand for exchange is created not only by merchandise imports, but also by the invisible debits, loans made or foreign securities purchased, interest payable, expenditure of its nationals abroad or remittances of its residents to other countries, and accounts payable for sundry services. The securities purchased abroad may be foreign issues or foreign-held native securities resold or matured. All these factors which create a demand for foreign exchange raise foreign rates on the market of the country or depress its own rate on the foreign markets.

A supply of foreign exchange is created not only by exports of goods but also by invisible credits, as borrowings by a country, sales of native securities or holdings of foreign issues, interest receivable from abroad, expenditures of foreigners within the country, or remittances to it from abroad, and accounts receivable for sundry services.

ii. *The Trade Balance of the United States*

Except in time of war, most countries do not keep a record of all the debits and credits which determine the international balance. As a rule, official records only of commodity exports and imports and of gold are available.[2]

Attempts have been made to obtain the total debits and credits in the trade balance of the United States. For instance, Sir George Paish, attempted to strike such a balance for the year 1908-1909. He estimated that $6,000 million of United States securities were held abroad, as follows:

	Million dollars
By Great Britain	3500
France	500
Germany	1000
Netherlands	750
Belgium, Switzerland, etc	250
Total	6000

In addition, he estimated that the floating debt, drafts in anticipation of exports, amounted to $500 million. On this investment of $6,500 million he assumed an annual interest debit of $325 million. Investments by the United States in Cuba and Mexico and elsewhere, aggregated $1,500 million, interest on which was $75 million. On the net investment of $5,000 million, the net annual interest payable was $250 million. The other debits calculated by Paish were—

	Million dollars
Tourist expenses	175
Remittances to friends through banks, express or postal money order	150
Freights, less coal and supplies bought in United States	25
Total	350

Emigrants and tourists took $60 million out of the country and immigrants brought about the same sum into the country. Debits

[2] Paish, Sir George, The Trade Balance of the United States. Report of the National Monetary Commission, Doc. 579. Washington: Government Printing Office, 1910.

on account of foreign fire and marine insurance were approximately offset by credits arising from life insurance by American companies abroad. The total invisible balance was therefore $600 million approximately.[3]

iii. *History of the Trade Balance of the United States*[4]

(a) *Résumé*—

The history of the trade of the United States illustrates the effects of the flow of capital into a country and of the subsequent payments of interest thereon. In the earliest period of American history there was an excess of imports which was offset by the profits of the extensive merchant marine of the United States. In the period from 1821 to 1837 capital was attracted to the United States and as a result the excess of imports increased. In the interval from 1838 to 1849 an excess of exports gradually arose to pay interest on the capital that had previously been invested in the United States. In the period from 1850 to 1873 an excess of imports again appeared due to the inflow of foreign capital which developed our railroads and built up the west. In the period from 1874 to 1895 an excess of exports developed due in part to the lessened inflow of capital resulting from the default by many states on their securities. Another factor was the growth of interest charges on the foreign indebtedness and the repayment of maturing loans. In the period from 1896 to 1914, the excess of exports increased. A large factor was the outflow of funds from the United States in payment of expenditures of Americans traveling or living abroad and the increasing volume of remittances of immigrants to their friends and relatives in Europe, as well as the withdrawal of the savings of immigrants who returned to their native lands. The period of the war was characterized by a huge excess of exports due chiefly to the outflow of capital from the United States.

[3] Paish, George, *ibid.*, pp. 175-195.

[4] Bullock, Chas. J., Williams, John H., and Tucker, Rufus S., "Balance of Trade of the United States," Harvard Review of Economic Statistics, April, 1920. See also Paish, *ibid.*, pages 195 *et seq.*

The statistical résumé is given herewith:

AVERAGE ANNUAL BALANCE OF TRADE OF THE UNITED STATES

By periods from 1821 to 1918

(in million dollars)

Fiscal year	Exports	Imports	Excess exports	Excess imports
1821–1837	82	93	....	11
1838–1849	116	113	3	....
1850–1873	274	338	....	64
1874–1895	783	670	113	....
1896–1914	1691	1204	487	....
1915–1918	4908	2411	2497	....

(b) *The Pre-War Period*—

The statistics for the period from 1896 to 1914 as computed by Bullock and his associates correspond closely to the figures of Sir George Paish in total, but differ slightly in the individual items. Bullock gives the annual net interest payable as $160 million, Paish sets it at $250 million. Both give tourist expenditures as $170 million, and immigrants' remittances as $150 million. Net freight charges according to Bullock were $34 million and to Paish $25 million. Net imports of gold according to Bullock were $9 million; Paish omits this item. Insurance premiums, commissions and miscellaneous items according to Bullock were $30 million; Paish offsets the American payments to foreign companies for fire and marine insurance by foreign payments to American companies for life insurance. Finally, Paish includes an item which does not figure in Bullock's calculation, namely the funds taken by emigrants and the funds brought in by immigrants which offset each other and vary from $50 to $60 million per annum. Bullock deducts from these debits net capital borrowings from abroad estimated at $53 million yearly. The net invisible debit balance according to Bullock was about $500 million and according to Paish $600 million, with a fluctuation downward of $100 million in years of depression.

AVERAGE ANNUAL BALANCE OF INTERNATIONAL ACCOUNTS OF THE UNITED STATES[5] IN THE PERIOD 1896 TO 1914

(in million dollars)

Items	Amounts
Credits:	
Excess of exports of merchandise and silver	487
Net borrowings of foreign capital	53
Total	540
Debits:	
Net interest payable abroad	160
Tourist expenditures	170
Immigrants' remittances	150
Net freight charges	34
Net gold imports	9
Insurance premiums, commissions, etc	30
Total	553

(c) *The War Period—*

The period of the war, approximately July 1, 1914, to December 31, 1918, showed a trade balance which was very different from that of the pre-war period, and in fact represented a stage in the development of the United States which might have taken several decades to attain. The chief factor that characterized the period was an enormous outflow of capital in the form of loans by individuals and by the United States Government. Another factor was the return and repayment of American securities sold to Europe. Finally, imports of gold were in unprecedented volume as compared with former years, though relatively small compared with the two items, loans to Europe and American securities returned. These three large credits offset and made possible a volume of exports without parallel in history. Other factors are of interest but of less significance.

[5] Bullock, *ibid.*, pp. 228-232.

NET BALANCE OF INTERNATIONAL ACCOUNTS OF THE UNITED STATES [6] FOR THE PERIOD JULY 1, 1914, TO DECEMBER 31, 1918

(in million dollars)

Items	Amounts
Credits:	
Excess of exports of merchandise and silver	11,808
Net interest payments receivable	650
Total	12,458
Debits:	
Net imports of gold	1,029
American securities returned	2,000
Public and private loans to foreign countries	8,840
Net freight charges	165
Payments for chartering foreign vessels	261
Immigrants' remittances	600
Total	12,895
Net debit	437

(d) *The Outlook*—

In comparing the pre-war period with the war period the important change in the invisible balance of trade of the United States is that the item, net interest payments, which constituted a debit of $160 million before the war, has become a credit of $525 million after the war, that is assuming that the inter-Allied loans will not be repudiated or canceled. A less significant change is the reduction of our annual debit on account of freight payments from $34 million to a considerably smaller figure or perhaps even to a net credit, depending on the final status of our merchant marine. As the result of these two changes a total net debit of $525 million before the war has been changed to a total net credit of $195 million. Before the war our net invisible debit was liquidated by an excess of exports. On the assumption that our inter-Allied loans will stand, our net invisible credit ought ultimately to be balanced by a net excess of imports. However, if the inter-Allied loans are canceled, repudiated, or even suspended, our merchandise balance will probably for a long time to come show a net excess over pre-war figures.

[6] Bullock, *ibid.*

iv. *Arbitrage*[7]

A brief explanation of arbitrage will enable the reader to follow one of the anomalous and very puzzling financial phenomena of the war—the depreciation of the dollar on the neutral markets of Europe, in spite of a large excess of exports from the United States to these countries.

Although most of the world's trade before the war was transacted with sterling exchange, the other currencies were quoted in the principal trading centers of the world. Usually, bills on any particular country were quoted at the same percentage of its gold parity on several markets. If, however, a currency was quoted at unequal rates on several markets, foreign exchange dealers would buy the currency in the cheaper market thus raising the rate and sell it in the dearer one, thus depressing the rate until the differences were eliminated. Arbitrage is the process of eliminating the differences in quotations of exchange rates of a country on several markets, or of equalizing the quotations on all markets.

As evidence of the equalization of the exchange rates on two or more markets, the following tables are presented. The London rates on Paris and the Paris rates on London are either identical or nearly so:

EXCHANGE RATES ON UNITED KINGDOM, FRANCE AND ITALY[8]

End of month, 1919	*London on Paris, fr. per £	Paris on London, fr. per £	London on Italy, lire per £	Italy on London, lire per £
January	25.98	25.98	30.31	30.31
February	25.98	25.98	30.31	30.31
March	27.40	27.62	37.00	33.50
April	28.22	28.37	34.75	35.20
May	29.85	29.40	39.50	37.95
June	29.85	29.71	36.87	36.87
July	31.02	31.42	37.65	37.69
August	33.87	33.97	40.85	40.75
September	35.45	34.70	41.10	41.20
October	36.22	36.05	43.37	43.07
November	39.35	39.26	49.00	49.00
December	40.05	40.02	49.12	49.37

*London quotations are cable averages from Thursday of the last week of the month as quoted by the London Economist. Foreign quotations on London are averages for the particular date quoted by the Economist for the last week of the month.

[7] Schmidt, F., Arbitrage und Wechselkurse, Schmollers Jahrbuch, 1919, xliii, pp. 203-262.

[8] Federal Reserve Bulletin, March, 1920.

During most of the year the quotations correspond closely. The unusually wide variations are due to the violent fluctuations of the exchange rates, resulting from the abandonment of their stabilization, and the fact that quotations do not cover identical days.

Perhaps a clearer evidence of the effects of arbitrage in equalizing exchange rates throughout the world may be had from a comparison of sterling rates in New York with the relative rates of both sterling and dollars on a third market, Copenhagen. The rates are the high quotations for the months and show a fair correspondence from 1915 onwards. The 1914 quotations show discrepancies due to the erratic fluctuations in the early months of the war.

THE EFFECT OF ARBITRAGE ON STERLING AND DOLLARS

Based on gold parity as 100

Month	High Rates in Copenhagen *			High rates in New York † on London
	On London	On New York	Ratio	
	(a)	(b)	(a) : (b)	
1914				
July	100.93	100.67	100.3	113.02
December	105.72	107.77	97.1	100.53
1915				
June	100.00	103.22	96.8	98.34
December	98.56	101.61	97.0	97.43
1916				
June	94.16	95.98	98.1	97.79
December	97.08	100.00	97.1	97.75
1917				
June	90.91	93.57	97.1	97.72
December	84.80	87.94	96.5	97.66
1918				
June	84.58	87.13	97.1	97.71
December	98.34	100.80	97.4	97.78
1919				
June	108.97	114.48	95.2	95.24
November	109.69	132.44	82.9	85.53

*Federal Reserve Bulletin, January, 1920, p. 44.

†Federal Reserve Bulletin, September, 1918, p. 837, and January, 1920, p. 49.

As final evidence of the effects of arbitrage in equalizing exchange rates we give herewith the rates for Swedish kroner on Basle and then for comparison the rates on both the Basle and Stockholm markets of sterling, franc, dollar, and mark bills. The ratio of the rates on the Swiss market to rates on the Swedish market of bills in the four currencies corresponds very closely to the Swiss quotations for Swedish kroners.

THE EFFECT OF ARBITRAGE ON SWISS FRANCS AND SWEDISH KRONERS[9]

Based on a gold parity as 100

Currency and Market	July, 1914	Jan., 1915	July, 1915	Jan., 1916	July, 1916	Jan., 1917	July, 1917	Dec., 1917
Swedish kroner on Basle...	99.37	95.22	100.08	102.60	109.08	106.60	108.04	106.92
Sterling on Basle.........	99.80	101.70	101.62	98.33	100.07	94.88	85.84	82.75
Sterling on Stockholm.....	100.50	106.17	100.99	95.10	92.13	88.89	83.70	76.93
Francs on Basle..........	100.03	102.15	95.00	88.85	89.75	86.10	79.00	76.70
Francs on Stockholm......	100.74	107.62	95.78	86.17	82.75	80.94	77.35	71.76
Dollars on Basle.........	99.18	102.07	103.62	100.34	102.27	97.06	88.37	84.32
Dollars on Stockholm.....	100.80	107.23	103.22	97.32	94.93	91.53	86.03	79.60
Marks on Basle..........	99.36	93.33	88.29	77.25	76.60	68.53	51.43	69.40
Marks on Stockholm......	100.13	98.32	88.38	76.17	71.49	64.14	51.25	60.65

It is remarkable that with the varying rates of decline of mark, franc, sterling and dollar exchange the relative position of the Swiss francs and Swedish kroner should have been maintained alike on all markets.[10]

Before the war the differences between the relative levels of any currency on two foreign markets was very slight. During the war the "pegging" of the Allied exchanges resulted in the establishment of different levels for the same currency in the "pegged" New York market and in the free neutral markets. As a result of arbitrage transactions the "pegged" currency, sterling, franc or lira, was bought in the free neutral markets where it fell to its natural level and sold in the "pegged" New York market where it was maintained at an artificially high level. As a result of this selling

[9] Swedish rates compiled from Kommersiella Middelanden, January 15, 1918, in Federal Reserve Bulletin, May, 1918, p. 380. Swiss rates compiled from the Swiss Bankvereins' Revue Economique et Financière, 1914-1917, in Federal Reserve Bulletin, May, 1918, p. 391.

[10] The British Board of Trade Journal of January 8, 1920, and subsequent dates gave the foreign exchange rates of several of the leading countries on London, Paris and New York. These were calculated in percentage of gold parity and indicate the close correspondence in the relative rates as the result of arbitrage transactions.

pressure on New York, dollar exchange declined on the neutral markets in sympathy with the Allied exchanges which it supported. To correct this condition several merchants and one member of the Senate urged the prohibition of arbitrage. However, the effect would have been detrimental to Allied military success and the proposal was not adopted.

As the result of the release of the "peg," or the abandonment of the stabilization of the Allied exchanges, the differences in the exchange rates of sterling, for instance, on the Zurich and New York markets were eliminated. Arbitrage again operated to equalize the relative levels of the currencies on all markets. British, French and Belgian exchange declined in New York to the levels they maintained in the neutral markets. The dollar, on the other hand, rose on all markets.

v. *Correctives*[11]—The consideration of the correctives of the foreign exchanges may be reduced to two cases (a) if gold flows freely and (b) if gold does not flow. The first case may be subdivided further into two cases, (1) where the countries involved are on a gold basis, and (2) where the countries involved are on a paper basis.

(a) *Between Countries on a Gold Basis*—

Between countries on a gold basis, with gold flowing freely exchange rates can fluctuate only between narrow limits, namely, the upper and lower gold points. A country with an excess of exports may have more bills for sale than it needs for the settlements of all its debits. This surplus will depress the exchange rates of foreign countries in its market. On the other hand foreign countries will have insufficient bills on this exporting country and the rates for its bills will therefore rise. When the rise above gold parity exceeds the cost of packing, insuring and shipping gold, merchants will prefer to ship gold, and thus limit the rise in exchange. How does the gold shipment correct the appreciated exchange?

1. CHANGES IN THE GOLD SUPPLY—When in payment for an excess of exports a country receives gold, prices tend to rise because of the increased quantity of gold. Foreign purchases in this country

[11] Further discussion may be found in Goschen, Theory of the Foreign Exchanges, pp. 60, 63, 70, 71, 74, 78. Also Brown, H. G., Principles of Commerce, pp. 142-151.

then tend to cease and thus its exports decline. Simultaneously and as a result of high prices imports increase. When in settlement of an excess of imports a country must ship gold, prices tend to fall as a result of the diminished supply of gold. Imports by this country then tend to decline, and exports tend to increase, thus eliminating its excess of imports. A flow of gold between the two countries changes their relative price levels and tends to correct the condition that caused the flow.

2. Changes in rates—Fluctuations of exchange rates in gold countries are self-correctives. If sterling sells for $4.91 in New York owing to a scarcity of bills on London, the increased purchasing power of sterling induces British merchants to buy in New York and thus create a supply of the needed sterling exchange. Simultaneously American merchants reduce purchases in Great Britain and thus decrease the demand for sterling. Similarly, if sterling sells for $4.81 in New York, owing to an excess of bills on London, the lower cost of sterling induces Americans to buy goods in England and thus create a demand for sterling bills. Simultaneously British merchants reduce purchases in the United States and thus decrease the supply of sterling bills. Therefore an excess of exports, raising exchange rates, raises prices to the foreigner, and thus tends to check exports. An excess of imports, lowering exchange rates, raises the price of foreign goods, and thus tends to check imports.

3. Changes in the volume of goods—A growing excess of exports tends to create a shortage of goods in the exporting country and thus tends to check exports. A growing excess of imports tends to create a surplus of goods and thus tends to check imports.

Therefore a flow of trade in one direction tends to correct itself through a change in the price level which is brought about by a change either in the volume of gold, in the exchange rates, or in the volume of goods.

(b) *Between Countries on a Non-Gold Basis, If Gold Flows*[12]—

If gold is free to move, a country on a paper basis or on a

[12] For further discussion see papers, "International Trade Under Depreciated Paper," by F. W. Taussig and Jacob H. Hollander, May, 1917, and August, 1918, Quarterly Journal of Economics.

silver basis reacts in a way similar to countries on a gold basis. The rate of exchange in the paper or silver country on gold countries depends on the cost of gold in terms of paper or silver. Its exchange rates rise as its paper or its silver depreciates in relation to gold. Its exchange rates fall as its paper or its silver appreciates in relation to gold. On the other hand, the rate of exchange in the gold countries on the paper or silver country depends on the cost in gold of the paper or silver money. As the paper or silver depreciates, exchange on the paper or silver country falls. As paper or silver appreciates, exchange on the paper or silver country rises. In the paper or silver country the upper limit of exchange on the gold country cannot exceed the paper or silver cost of gold plus the cost of shipping it, provided the premium is regularly established and is not artificially restricted.

In a country with inconvertible paper currency gold tends to lose its character as a circulating medium, and to become merchandise and to react like other commodities. Therefore when there is an excessive issue of paper all prices rise, including the price of gold. But gold is purchasable and exportable like any other commodity. How do the correctives of exchange operate?

1. CHANGES IN GOLD SUPPLY—The outflow of gold from a paper country tends to make gold dear in relation to other goods. Paper prices rise because of the decreasing likelihood of redemption. But gold prices fall, just as in a country on a gold basis. Therefore exports increase, imports decrease and as a result gold flows back to the paper-standard country. Thus, although the fluctuations are wider under a régime of inconvertible paper, a gold flow operates to correct the exchanges in a paper-standard country, in the same way as in a gold-standard country.

2. CHANGES IN RATES—In a country on a paper basis the extremes of fluctuation are determined by the cost of shipping gold, which in turn depends upon the depreciation of the paper. The fluctuations in exchange rates of a non-gold standard country make more or less profitable the purchase of goods within it, and these fluctuations tend to act as correctives of the trade conditions which caused them.

The limits of fluctuation in foreign exchange rates of the paper country will be the cost of shipping gold plus the extent of

the premium on gold, provided the premium is regularly established and provided gold flows freely.

3. CHANGES IN THE VOLUME OF GOODS—The surplus or scarcity of goods tends to correct itself. If a paper-standard country imports heavily, the larger supply of goods in relation to paper and to gold tends to make prices lower in either paper or gold. In the exporting country on a paper basis the relative scarcity of goods tends to make prices higher, measured either in paper or gold. For this reason more goods will be bought with gold in the country having an excess of imports and goods therefore tend to flow out of the country.

Excess buying by a paper country in another would be corrected by the flow of goods, by the effect of that flow on prices in the two countries, and by the relation of goods to gold, as indicated in the case of two countries on a gold basis.

(c) *Between Countries on a Non-Gold Basis If Gold Does Not Flow*—

If a country has little or no gold or if the exportation of gold is prohibited, the fluctuations in exchange rates are much wider than in the case noted above, for the limits set by the gold points are removed. This is the condition in most of the countries of Europe to-day. Since gold cannot be had for paper, since it is illegal to pay a premium, and since the gold bullion is in the control of the central banks, gold does not flow and exchange rates fluctuate violently. When gold does not flow and when there is no recognized premium on paper the relative value of paper to gold has no significance in determining exchange rates. The sole determinants of the rates of exchange then are the supply of and demand for bills. If the demand for bills exceeds the supply, the country cannot effect a settlement except by reducing its imports or increasing its exports.

Countries with inconvertible paper standards usually have an excess of imports. A paper regime usually follows a period of heavy foreign borrowing and of an excess of imports such as prevailed in the belligerent countries of Europe during the World War. During a further period of an excess of imports, the exportation of gold must be prohibited, otherwise the supply would be drained. When conditions improve so that credits exceed debits

and gold flows into the country, the prohibition on the exportation of gold may be removed.

Is it to be assumed then that there are no limits to the fluctuations in exchange rates of a country on an inconvertible paper basis? In the absence of a flow of gold the two other correctives mentioned above still apply. However they are not so sensitive. Under conditions of the free flow of gold, fluctuations must be narrow because gold is universally current; because it is compact and because the cost of shipping it is low, in normal times perhaps 1 per cent of its value.

1. Changes in volume of goods—A tendency to a surplus of goods in the importing country and a scarcity of goods in the exporting country tends to correct a flow of commodities in one direction. Therefore the fluctuations of exchange rates are not utterly without limit. However, these limits are very wide, for several reasons. Commodities are not so universally current as gold. Only such commodities are imported as are wanted, only such are exported as are available. Again the cost of shipping commodities is greater, relative to price than of shipping gold, and depends on the character and the bulk. The period following the World War will therefore be characterized by very wide fluctuations of the exchanges of countries with an inconvertible paper standard, but these fluctuations will not be unlimited.

The shortage and glut of goods will affect the relative price levels or barter levels between importing and exporting countries, so that a strong flow of trade in one direction will tend to correct itself.

2. Changes in rates—The relative price levels will also be affected more directly by variations in exchange rates, as in the case of gold standard countries explained above.

(d) *Summary*—

Exchange rates between countries on a gold basis are corrected by a flow of gold. The exchange rates respond immediately and fluctuations are kept within narrow limits. Less immediate correctives are changes in the rates themselves or in the relative price levels and changes in the relative abundance or scarcity of goods.

Between countries on a paper basis which do not restrict the free flow of gold the same principles apply, except that the gold points which restrict the fluctuations of the paper exchanges depend

upon the paper premium. That is, the extreme fluctuation of the paper exchanges equals the cost of gold in terms of paper plus the cost of shipping gold. The same reasoning applies to a country with a silver standard.

If the movement of specie is prohibited, the gold points are removed, and fluctuations are more violent. The sole control is the tendency of a flow of trade in one direction to check itself and to induce a reverse flow, either as a result of the relative scarcity or abundance of goods or more directly as the result of the changes in price levels which follow variations in exchange rates.

B. Quotations

The course of the several exchange rates before the war may best be studied on the London market, because all the important currencies were quoted there and London was a free gold market. A study of exchange rates during and after the World War must be based on New York quotations, because, except during the period from October, 1917, to June, 1919, New York constituted a free gold market. Therefore depreciation of exchange rates in New York measured the discount on paper money.

The highest records for the exchange rates of the belligerents since the beginning of the war were reached in August, 1914, when Europe recalled its funds from foreign countries. The highest records for the neutrals were attained during the period when sterling was pegged in New York, and before measures to reduce the premium were effected. The lowest figures since August, 1914, alike for both belligerents and neutrals were quoted during and after 1920.

High and Low Exchange Rate in New York from August 1, 1914, to December 31, 1920

Currency	Parity	High	Low	Date of high	Date of low
Sterling	$4.8665	$7.0000	$3.1800	Aug. 4, 1914	Feb. 4, 1920
Francs	.1930	.3312	.0570	Aug. 4, 1914	Nov. 11, 1920
Lire	.1930	.2500	.0330	Aug. 4, 1914	Nov. 8, 1920
Marks	.2382	.2750	.0101	Aug. 4, 1914	Jan. 28, 1920
Kronen (Austrian)	.2026	.2300	.0020	Aug. 4, 1914	Dec. 17, 1920
Guilders	.4020	.5237	.2900	Aug. 9. 1918	Nov. 6, 1920
Francs (Swiss)	.1930	.2597	.1505	May 20, 1918	Nov. 8, 1920
Pesetas	.1930	.3000	.1183	April 17, 1918	Nov. 13, 1920
Kroner (Swedish)	.2680	.4700	.1630	Nov. 2, 1917	Feb. 4, 1920
Kroner (Danish)	.2680	.3900	.1305	Oct. 27, 1917	Nov. 8, 1920

Corresponding to the lowest quotation for sterling exchange in New York, the price for gold bullion in London rose to the highest record on February 5, 1920, and was quoted at 127s. 4d, compared to parity of 85s. per ounce.

The quotations following are expressed not absolutely in terms of currency but relatively in terms of gold parity, which will be taken as 100 throughout. This method of quotation is not new in the countries of the Latin Monetary Union, where depreciated exchanges are always under 100 and appreciated rates always over 100. Should a world monetary unit eventually be established all quotations being based on 100 as gold parity would read as the relative quotations in the tables given below.

i. *New York Rates on Allied Powers in the World War*

(a) *From August, 1914, to April, 1917*—

At the outbreak of the war exchange rates fluctuated violently. Sterling reached $7.00 in August, declined to about $5.00 in October, touched parity in December, and by September, 1915, had gone down to $4.50. Europe recalled the short-term funds which had been loaned in the New York market. This caused a demand in New York for exchange on London, Paris and Milan and as a result for some months after the outbreak of the war these exchanges ruled above par. However, with the increase of exports from the United States to Europe these three exchanges began to decline on the New York market, but were stabilized by Great Britain through the resale of American securities distributed in Europe, the floating of loans, both secured and unsecured, in New York, and the sale of British treasury bills. New York rates for sterling fluctuated relatively little during this period although the difficulty of financing became increasingly severe during the winter of 1916-1917. The rate was maintained at about $4.76, or at 97.9 per cent of parity. French francs declined far more than did sterling. The decline was very gradual, from 19.3 cents, or parity, maintained in January and February, 1915, down to 17.1 cents, or 88.7 per cent of parity, in the winter of 1916-1917. Lira rates declined more than either of the others. They can hardly be said to have been stabilized, rather there was a continuous decline from 19.3 cents, or parity, in October, 1914, down to 13.1 cents, or 67.9 per cent of parity, in March, 1917.

FIGURE XII

The line at 100 represents gold parity and the figures, the percentage of parity.

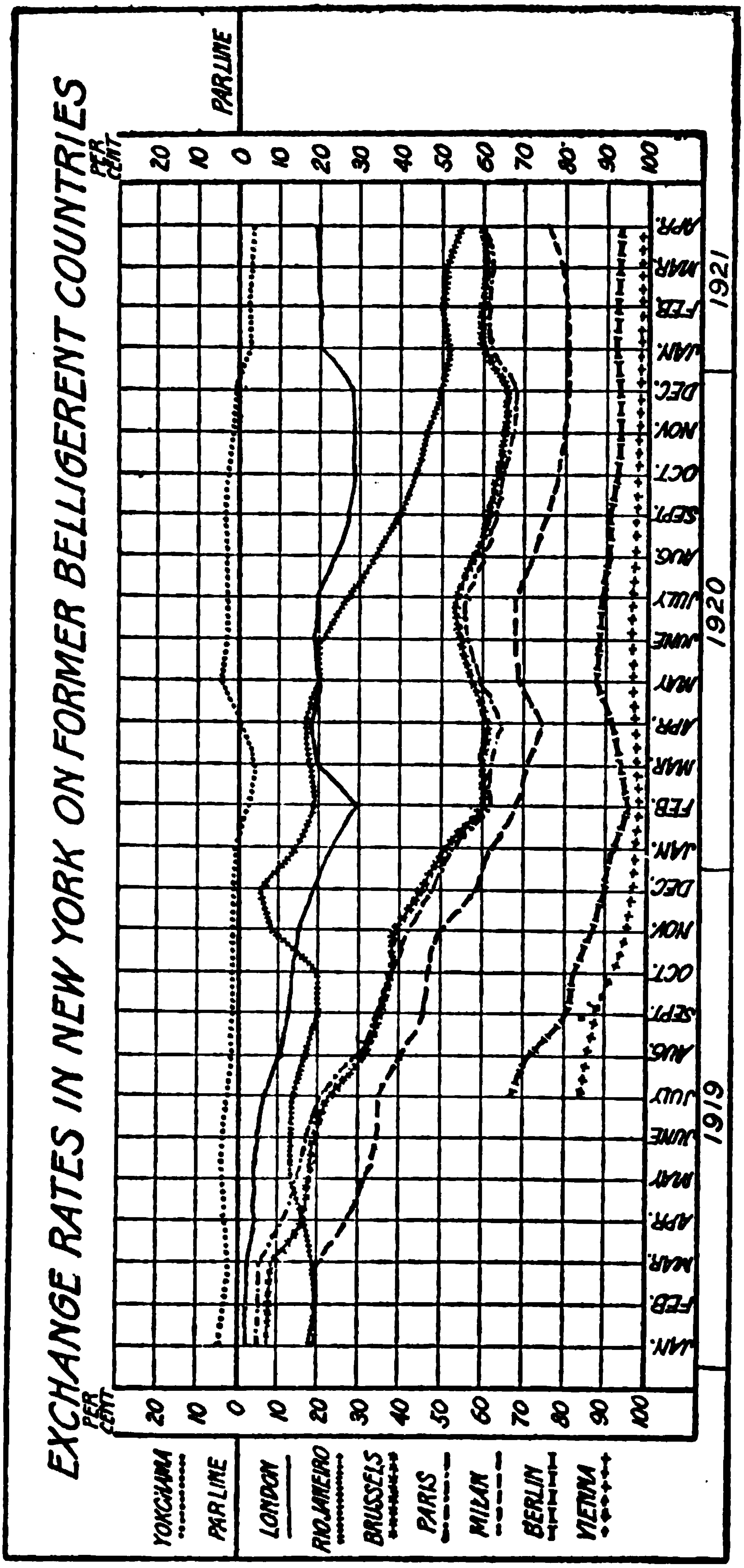


FIGURE XIII

The line at 0 represents gold parity and the figures, the deviation from parity

(b) *From April, 1917, to March, 1919*—

During this period of about two years the exchange rates of the Allied powers on New York were stabilized. The method and effects will be discussed later. At present we are primarily interested in the quotations. During this period the sterling rates on New York remained practically stationary at $4.76, or at 97.9 per cent of parity. Franc rates in New York rose upon the entry of the United States into the war from 17.1 cents to about 17.5 cents, or about 90.8 per cent of parity, which rate was maintained through July, 1918. From July, 1918, through March, 1919, when the "peg" was released, francs ruled at 18.3 cents, or at about 95.0 per cent or parity. French exchange was stabilized by means of United States government advances as well as by loans by Great Britain. The lira rates were stabilized least successfully. From about 13.1 cents, or about 67.9 per cent of parity, the lira rose slightly upon the entry of the United States into the war, but declined down to 11.1 cents, or 57.8 per cent of parity in May, 1918, when as the result of aid by the United States Treasury they were stabilized at 15.7 cents, or 81.4 per cent of parity. This rate was maintained from August, 1918, through March, 1919.

(c) *After March, 1919*—

In March, 1919, the Allied exchanges were "unpegged" on the New York market and dropped precipitately thereafter. Of the three Allied exchanges, sterling dropped least and lire declined most, with francs following closely. Before the "peg" was released sterling was quoted at about $4.76. Month by month the rates fell and in December, 1919, the high rate for sight drafts during the month was $3.98. During the early part of 1920 there was a slight recovery followed by a subsequent relapse, and a further decline. Toward the end of the year the rates were maintained around $3.50. The high and low demand quotations for 1920 were $4.06 and $3.19 as compared with $4.76 and $3.66 for the year 1919.[18]

The Paris rates declined to a far greater extent. Before the "peg" was released francs were quoted around 18.33 cents per franc. Thereafter, the decline in the rate was continuous practically. In December, 1919, the high rate during the month was 10.08 cents per franc. In 1920 the decline continued through

[18] New York Times, Annalist, January 3, 1921.

April, during which month the high rate was 6.93 cents. There was a recovery during May and June and a subsequent decline. In October the high rate for the month was 6.75 cents and the end of the year was characterized by further declines. The high and low rate for francs in 1920 was 9.28 cents and 5.70 cents, as compared with 18.35 cents and 8.50 cents for the year 1919.

Monthly High Demand Rates in New York of Currency of Allied Powers in the World War[14]

Based on gold parity as 100

	Per cent	Per cent	Per cent
1914			
June	100 50	100 62	100.36
July	113 02	112.64	105.75
August	114.25	101.61	105.75
September	104 03	102.59	98.70
October	102.33	102.59	100.21
November	100 87	101.71	97.41
December	100.53	101.40	99 07
1915			
January	99 74	100 26	97.31
February	99 65	100 00	95.96
March	98 89	98 50	91.71
April	98 63	97.46	89.79
May	98 63	97.46	90 05
June	98 34	95 34	87.72
July	98 04	93.63	85 49
August	97 86	91.76	83 16
September	97 20	89.90	83.83
October	97 09	89 90	83.32
November	96 86	89.92	80.57
December	97.43	89.17	79.53
1916			
January	98.22	88.86	79.12
February	97 94	88.50	77.46
March	97.91	88.19	79.69
April	97 91	87.36	82 12
May	97 86	87.56	83 58
June	97 79	87 82	81 61
July	97 79	87.72	81.24
August	97 79	87 98	80 16
September	97 97	88 76	80 62
October	97 75	88 76	80 16
November	96 94	88 70	77.93
December	97.75	88.81	77 82
1917			
January	97.78	88.70	75.23
February	97.77	88.65	73.16
March	97.72	88.70	67 93
April	97 78	91.24	75.18
May	97 72	90 78	73 99
June	97 72	90 52	73 63
July	97 74	90 41	72 18
August	97.72	89.90	71 61
September	97.72	89.79	68.86
October	97 67	90 73	67.10
November	97.65	90.36	65.23
December	97 66	90.41	64.87
1918			
January	97.68	90.83	62.33
February	97.68	90.73	60.93
March	97.68	90 52	62 07
April	97.71	90 62	58 96
May	97 71	90.83	57.77
June	97.71	90.67	58.50
July	97.68	90 67	64.66
August	97.98	94.61	81.40
September	97.71	94.72	81 35
October	97.71	94 77	81.61
November	97.76	96.11	81 61
December	97.78	95.02	81.60
1919			
January	97.78	[illegible] 97	81.40
February	97 78	94 96	81.44
March	97.77	94 81	81.44
April	96.01	88.11	73 81
May	96 42	85 36	69.08
June	95.24	82.63	66 00
July	93 91	79.77	65.83
August	89 49	70.97	60.10
September	87.59	66.25	54.71
October	86 97	61 83	53.14
November	85 53	58.58	51.50
December	81.94	52.23	41.98
1920			
January	77.83	48.08	39.12
February	70.94	38 76	32.12
March	81.22	39 17	29.74
April	82 55	35.91	23.44
May	80 45	41.19	31.30
June	81.94	43 47	32.18
July	81 [illegible]	44 25	31.87
August	76.[illegible]	39.43	27.41
September	73 20	36 32	24.30
October	72.07	34.97	21.86

[14] Federal Reserve Bulletin, September, 1918, pp. 837, *et seq.;* January, 1920, pp. 49-50; November, 1920, pp. 1159-60.

Lire, which were stabilized at about 15.72 cents before the "peg" was released, declined continuously to 8.10 cents, the high rate during the month of December, 1919. During 1920 the fall continued almost without interruption and in December, 1920, the rate fluctuated around 3.40 cents. The high and low quotations for 1920 were 7.57 cents and 3.34 cents as compared with 15.72 cents and 7.35 cents for 1919.

Toward the end of 1920 British exchange was at about 72 per cent of parity, French exchange at about 30 per cent, and Italian exchange at about 17 per cent of parity, in New York.

ii. *New York Rates on Neutral Powers*

(a) *From August, 1914 to April, 1917*—

Dutch guilders and Swiss francs rose in the New York market shortly after the outbreak of the war, probably because of the sharp decline in American exports to Europe and as a result of the increase of exports of Holland and Switzerland to the warring countries. Most of the neutral exchanges declined during 1915 as a result of the enormous increase of exports from the United States. Guilders and Swedish kroner rose in the New York market, possibly owing to the liquidation of securities on German account. Spanish pesetas, Swiss francs, and Argentine pesos were at a discount through 1915 and in the early part of 1916. However, as the efforts to "peg" sterling in the New York market increased all the currencies of neutral Europe tended to rise in New York. Before the United States entered the war the premiums on the neutral currencies had been considerable. Dutch guilders had risen to a premium of 14 per cent, Swedish kroner to 16 per cent, Swiss francs to 5 per cent, Spanish pesetas to 10 per cent and Argentine pesos to 5 per cent. In spite of the large excess of exports of the United States the neutral currencies were at a premium in New York because of the large loans by American investors to the Allied powers. At the time it is contracted a loan, like imports, tends to depress exchange rates. Therefore, our loans tended to neutralize the effect of our large excess of exports in creating favorable exchange rates on the dollar.

The table for the Allied currencies from 1914 through 1920 is given herewith:

(b) *From April, 1917 to March, 1919*—

During this period the neutral exchanges without exception were at a premium which reached levels that broke all records since the Civil War. The highest premium attained by Dutch guilders was 31 per cent, by Swedish kroner 70 per cent, by Swiss francs 35 per cent, by Spanish pesetas 54 per cent and by Argentine pesos 8 per cent. The details of these fluctuations and the reasons therefor will be discussed more fully later.

(c) *After March, 1919*[15]—

After March, 1919, when the "peg" on the Allied exchanges was released in the New York market, the free play of economic forces again took effect. In view of the large excess of exports of the United States dollar exchange rose on all markets and conversely all currencies declined on the New York market with a few exceptions, notably Argentina and Chile, in the trade with which countries the United States had temporarily an excess of imports. The premium of 9 per cent on Spanish pesetas in February and March, 1919, declined and by September was wiped out. During 1920 Spanish exchange declined continuously and by the end of 1920 was quoted at about 12.90 cents, at a discount of about 33 per cent. The high and low demand rates for 1919 were 20.90 cents and 18.70 cents and for 1920 about 19.30 cents and 11.75 cents.

Swiss francs were at a premium of about 7 per cent during March, 1919. The rate declined subsequently and went to a discount of about 8 per cent in August, 1919. At the end of December, 1920, the Swiss franc was at a discount of about 22 per cent, declining fairly continuously throughout the year. The high and low rates for demand exchange for the year 1920 were 18.37 cents and 15.05 cents, as compared with 20.62 cents and 17.42 cents for the year 1919.

Swedish kroner were at a premium of about 5 per cent during February and March, 1919, but after the "peg" was released the rate dropped fairly continuously to about 83 per cent of parity. During 1920 the rate declined to about 71.5 per cent of parity in February, rose intermittenly during the next five months and from

[15] The percentages of parity are taken from Federal Reserve Bulletin, November, 1920, and the New York Times high and low quotations are used.

FIGURE XIV

The line at 0 represents gold parity and the figures, the deviation from parity

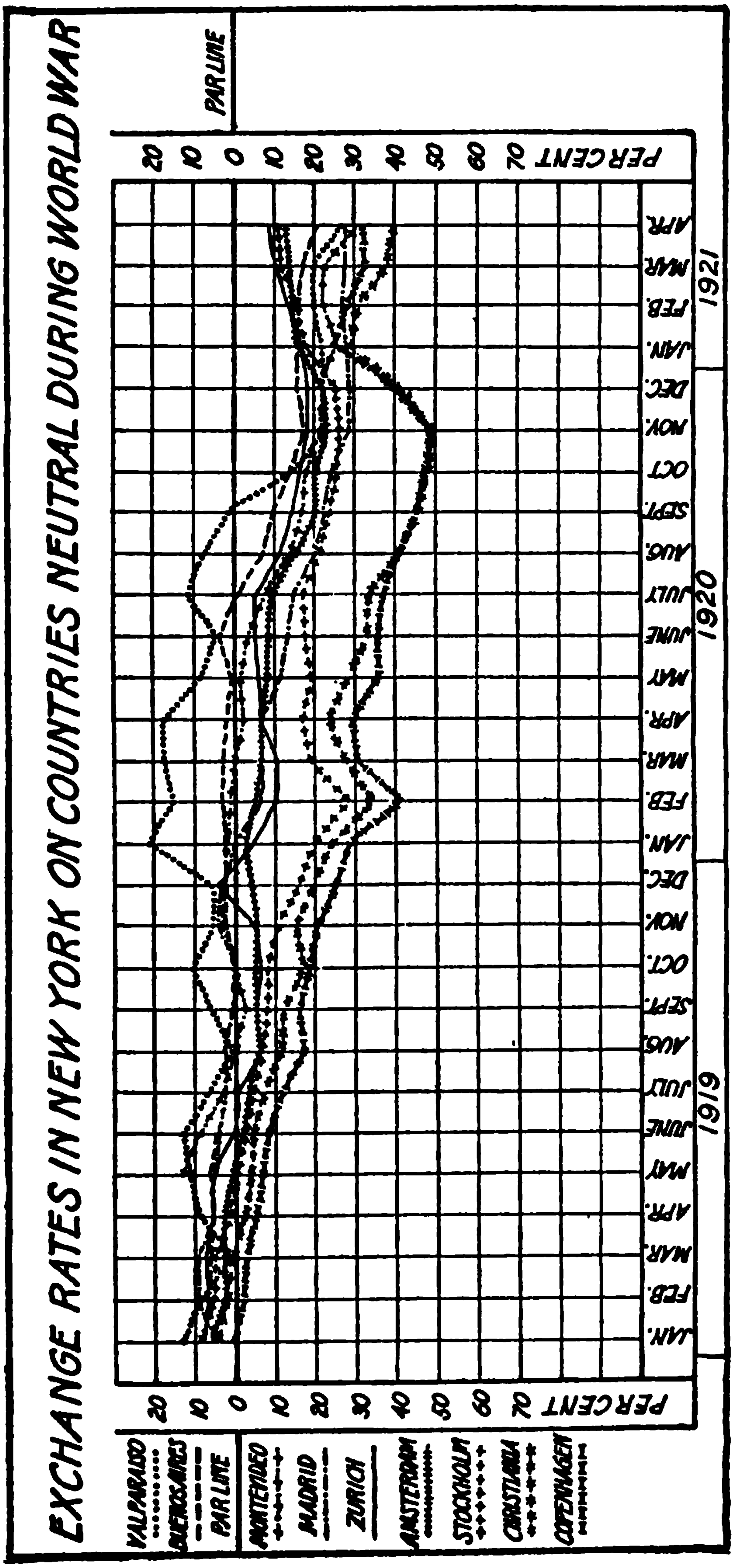


FIGURE XV

The line at 100 represents gold parity and the figures, the percentage of parity

August to the end of the year declined fairly continuously to a low level of 71.5 per cent of parity in December. The high and

MONTHLY HIGH DEMAND RATES IN NEW YORK OF CURRENCIES OF COUNTRIES NEUTRAL IN THE WORLD WAR [18]
Based on gold parity as 100

[18] Source: Federal Reserve Bulletin, September, 1918, January, 1920, and November, 1920.

For course of several currencies on the markets of European neutrals see the Bulletin for September, 1917, May, 1918, June, 1919 and November, 1919.

low rates for Swedish kroner in 1920 were 22.15 cents and 17.76 cents as compared with 29.12 cents and 20.50 cents for the year 1919.

Danish exchange was about par in January, 1919, and declined almost without interruption throughout the year. In December, 1919, the rate was about 74.2 per cent of parity. In 1920 there was a sharp break in February to about 58 per cent of parity, the rate rose slightly during the next five months and declined continuously thereafter to the end of the year, when demand rates were at about 56 per cent of parity. The high and low demand quotations for the year 1920 were 19.05 cents and 13.00 cents as compared with 26.88 cents and 17.20 cents for the year 1919.

Dutch guilders were at a premium of about 2 per cent of parity, which is 40.2 cents per guilder, during February and March, 1919. The decline was less than that of the Scandinavian currencies. At the end of the year guilders were quoted about 95 per cent of parity. The decline during 1920 was continuous and at the end of the year they were quoted at about 75 per cent of parity. The high and low quotations for 1920 were 39.06 cents and 29.25 cents as compared with 42.57 cents and 36.88 cents for 1919.

iii. *Currency of the Central Powers*

(a) *From August, 1914 to April, 1917—*

Marks were at a slight premium in the early part of the war but declined below par before the end of 1914. During 1915, the decline was practically continuous from a high rate of 92.8 per cent of parity in January to 83.8 per cent in December. During 1916 the rate fluctuated with the military fortunes of Germany. In May the high rate was 82.1 per cent of parity and in November the high rate was 73.7 per cent. At the entry of the United States into the war the mark was at about 75.1 per cent of parity which was relatively lower than francs, though not quite so low as lire or rubles.

The course of Austrian kronen is similarly a record of a practically continuous decline from parity at the outbreak of the war to about 54 per cent of parity before April, 1917, relatively the lowest of all the belligerent exchanges.

(b) *During the Belligerency of the United States*—

During the belligerency of the United States trading in German marks and Austrian kronen was suspended in New York. The course of these exchanges must therefore be followed on a neutral market. The reader can construct the hypothetical rates of German marks and Austrian kronen in New York by multiplying the percentage of parity of marks in Switzerland by the percentage of parity of Swiss francs in New York. During January, February, and March, of 1917 the high demand rates for Swiss francs in New York was about 103 per cent of parity. The average of demand rates for German marks in Basle was 68.5, 66.6 and 64.2 per cent of parity during the first three months of the year. The rates of German marks in New York were 75.0, 74.4 and 75.1 per cent.

Upon the entry of the United States into the war the monthly average demand rates for marks in Switzerland declined month by month from 64.2 per cent in April, 1917, down to 51.0 per cent in October, 1917. The armistice with Russia, the Treaty of

MOVEMENT OF DEMAND EXCHANGE RATES OF MARKS AND KRONEN IN SWITZERLAND DURING THE PERIOD OF THE BELLIGERENCY OF THE UNITED STATES [17]

Based on gold parity as 100

Month	Berlin	Vienna	Month	Berlin	Vienna
1917			1918		
January	68.53	51.80	January	67.03	50.00
February	66.62	48.80	February	70.27	54.76
March	64.19	47.71	March	68.93	52.61
April	64.19	47.23	April	66.50	50.09
May	60.83	46.09	May	64.07	46.42
June	55.48	41.42	June	55.89	38.09
July	51.43	38.81	July	53.27	37.62
August	51.64	38.85	August	55.40	36.16
September	52.49	39.52	September	54.65	35.94
October	51.03	37.85	October	58.29	40.00
November	52.65	38.33	November	50.81	31.16
December	69.46	50.00	December	48.58	29.01

[17] Compiled by Federal Reserve Board from Revue Commerciale et Industrielle Suisse, 1914-1918. Federal Reserve Bulletin, September, 1918, and June, 1919.

FIGURE XVI

The line at 100 represents gold parity and the figures, the percentage of parity

Brest-Litovsk, and the successful German offensive in the spring of 1918 all tended to raise the value of the mark. It reached a high level in February, 1918, when the rate was 70.3 per cent. Thereafter the monthly averages declined with slight interruptions to 54.6 per cent of parity in September, 50.8 per cent of parity in November, 48.6 per cent of parity in December, 1918, and so on down.

(c) *After July, 1919*—

When trading in enemy exchange was resumed in New York in July, 1919, the high rate for marks during the month was 8.00 cents or about 33.6 per cent of parity. The decline through the rest of the year was continuous and pronounced, and in December, 1919, the high rate was about 11 per cent of parity. During 1920 the rate continued to decline in the early part of the year, rose sharply in May to about 12.3 per cent of parity, maintained that level for the next three months, and declined thereafter to the end of the year. The boom in marks was due to heavy purchases of German securities by speculators. The last five months of the year were characterized by a decline almost to the low level of the year. In December marks were quoted at around 1.30 cents. The high and low demand rates for the year 1920 were 3.01 cents and 1.01 cents as compared with about 7.00 cents and 2.00 cents for the year 1919.[17a]

In July, 1919, Austrian kronen were quoted at a high rate of 3.50 cents or 17.3 per cent of parity. There was a terrific decline during the rest of 1919, the high demand rate in December being only 3.6 per cent of parity. This decline was continued and in February of 1920 the rate was about 2.0 per cent. There was a subsequent recovery, owing to speculative purchases by foreigners of Austrian securities as well as to the tendency toward amelioration of the terms of the Treaty of Peace. The high record was reached in June, and there was a subsequent decline. Toward the end of the year Austrian kronen were quoted at about 0.22 cent or about 1.1 per cent of parity. The course of the rates in New York, Stockholm and Basle is shown herewith.

[17a] New York Times Annalist, Jan. 5, 1920, and Jan. 3, 1921.

MOVEMENT OF MONTHLY HIGH DEMAND RATES OF MARKS AND KRONEN IN NEW YORK BEFORE AND AFTER THE PERIOD OF THE BELLIGERENCY OF THE UNITED STATES [18]

Based on gold parity as 100

Before	Berlin	Vienna	After	Berlin	Vienna
1914			1919		
June	100.25	100.10	July	33.59	17.27
July	101.10	100.34	August	30.44	14.80
August	101.89	100.34	September	19.31	12.95
September	.....	.....	October	18.37	8.14
October	99.00	97.88	November	13.64	4.93
November	93.09	88.03	December	10.92	3.60
December	97.16	88.67			
			1920		
1915			January	8.61	3.21
January	92.83	86.21	February	4.79	1.97
February	91.71	85.47	March	6.59	2.71
March	88.50	78.18	April	8.19	2.71
April	87.05	76.60	May	12.34	3.75
May	87.45	77.34	June	11.54	3.94
June	87.05	74.78	July	11.13	3.55
July	86.40	74.78	August	9.61	3.01
August	86.66	74.88	September	8.52	2.31
September	88.50	76.60	October	6.93	2.17
October	88.50	76.60			
November	86.00	72.41			
December	83.77	69.46			
1916					
January	80.62	63.65			
February	81.41	73.89			
March	77.07	64.04			
April	80.36	67.09			
May	82.06	66.50			
June	81.01	65.27			
July	78.26	63.05			
August	76.02	61.58			
September	74.52	59.85			
October	74.12	59.11			
November	73.73	58.52			
December	79.04	66.01			
1917					
January	75.04	58.08			
February	74.44	54.68			
March	75.11	56.65			

[18] Source: Federal Reserve Bulletin, September, 1918, January, 1920, and November, 1920.

HIGH MONTHLY RATE OF MARKS IN STOCKHOLM [18]

Based on gold parity as 100

Month	Rate	Month	Rate
1914		1917	
July	100.24	March	64.96
August	100.41	April	59.62
September	100.46	May	58.11
October	100.12	June	56.81
November	95.62	July	52.87
December	99.56	August	48.66
		September	46.86
1915		October	44.72
January	98.72	November	50.62
February	98.32	December	66.94
March	95.34		
April	92.25	1918	
May	90.00	January	69.75
June	88.42	February	70.31
July	90.56	March	70.87
August	88.54	April	67.22
September	89.72	May	66.09
October	88.99	June	64.97
November	86.91	July	57.37
December	81.00	August	53.44
		September	56.25
1916		October	66.94
January	77.96	November	59.06
February	74.98	December	50.34
March	72.39		
April	70.87	1919	
May	70.31	January	49.78
June	71.16	February	47.81
July	72.11	March	42.47
August	70.99	April	38.25
September	70.59	May	40.78
October	69.86	June	36.00
November	69.30	July	29.81
December	66.09	August	27.28
		September	22.50
1917		October	19.69
January	64.68	November	14.62
February	64.40		

[18] Federal Reserve Bulletin, January, 1920, p. 42.

FIGURE XVII

The line at 100 represents gold parity and the figures percentage of parity

NOTE: The rise of the silver exchanges was due to the greatly increased exports of the Far East of war goods during the war, and after the armistice of non-military goods the movement of which was restricted during the war and the deferred demand for which accumulated. The resulting shortage of silver, wherewith to effect payment of the international balance of trade, caused a sharp rise in the price.

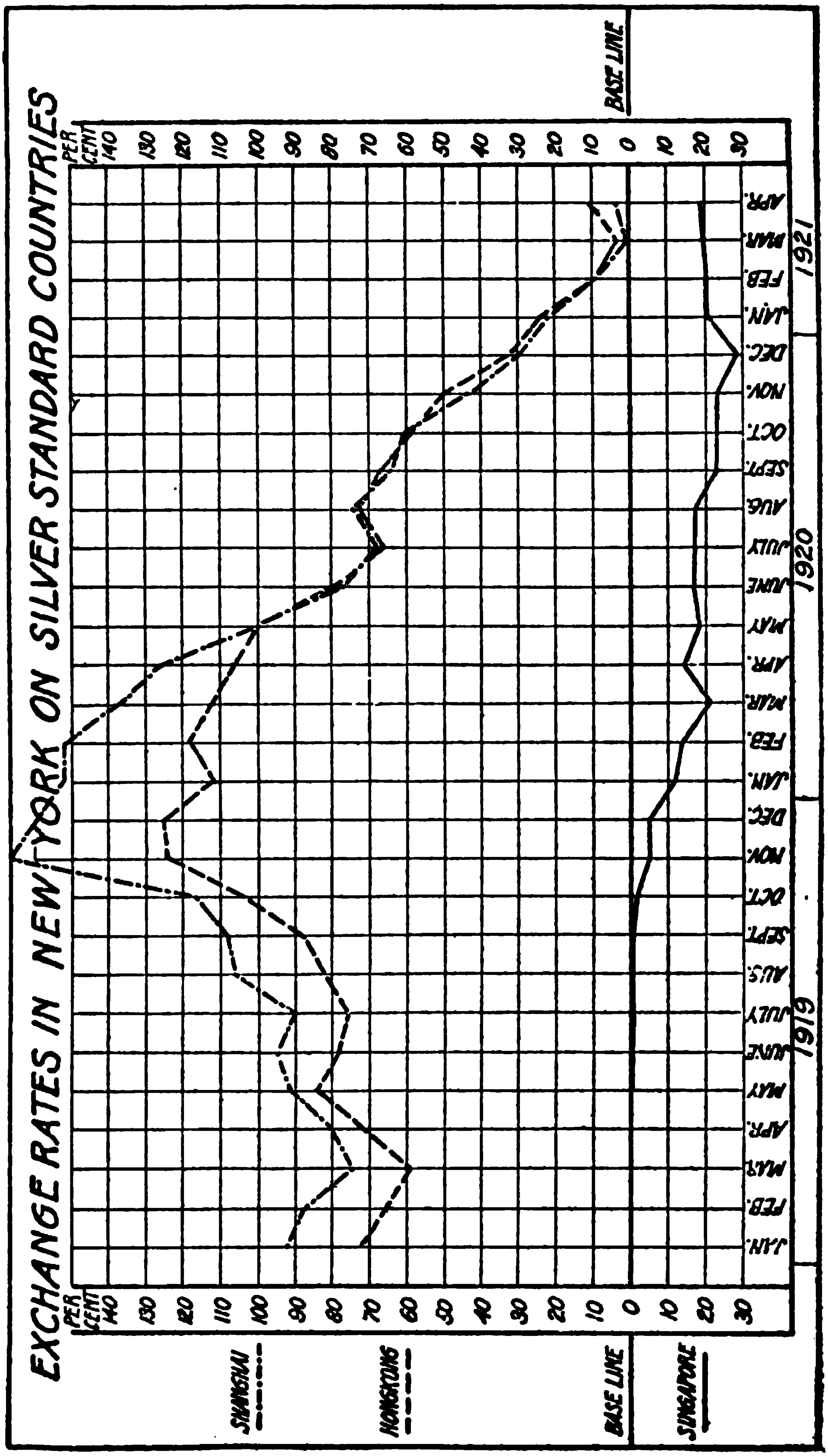


FIGURE XVIII

The line at 0 represents gold parity and the figures, the percentage deviation from parity

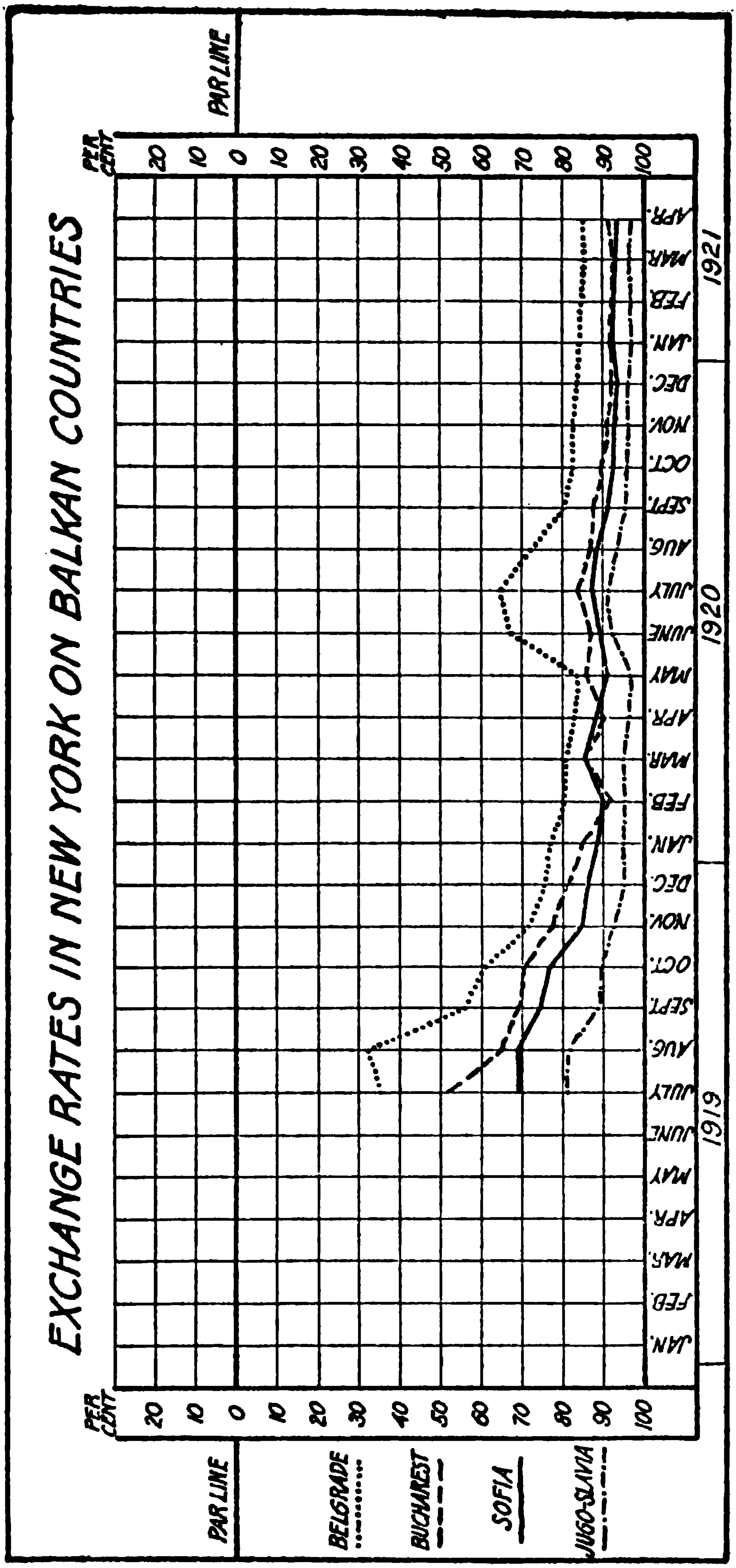


FIGURE XIX

The line at o represents gold parity and the figures, the percentage deviation from parity. The depreciation of these exchanges is due to the extreme and continued inflation of the currency

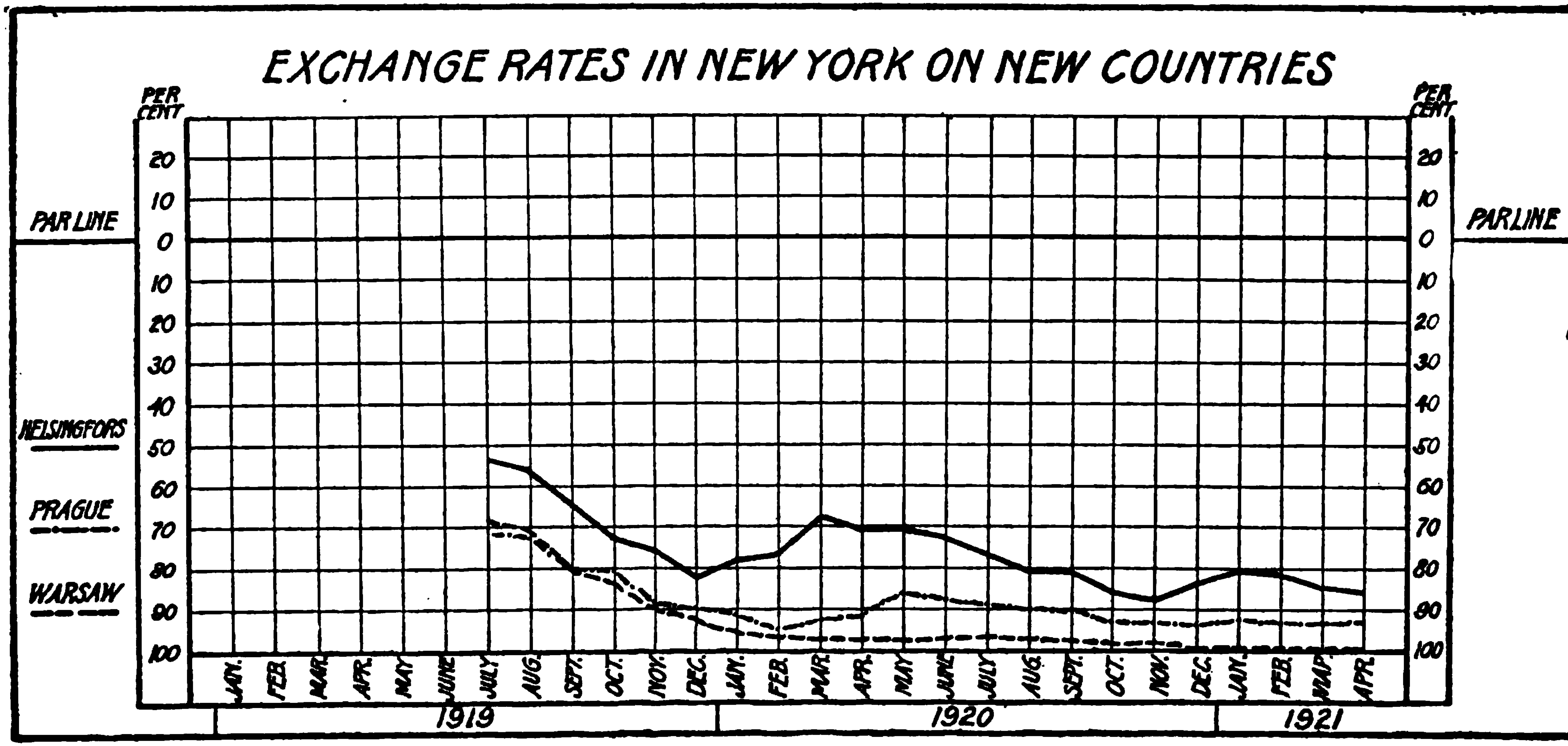


FIGURE XX

The line at o represents gold parity and the figures, the percentage deviation from parity. The depreciation of these exchanges is due to the extreme and continued inflation of the currency

C. The Causes of Exchange Fluctuations

Before the war the limited exchange fluctuations were due primarily to commercial factors, such as changes in the volume of exports or imports of commodities or of gold, or to the flow of capital incident to borrowing or lending. But during the war embargoes on the shipment of goods, on the movement of gold, and on the buying and selling of securities warped the exchange rates. In addition fiscal and political factors which affected the likelihood of resumption of specie payment had an important part in dislocating exchange rates.

i. *Commercial Factors*

(a) *Before "Pegging" Sterling—*

The outstanding commercial factor was the large excess of exports from the United States which increased throughout the war. In the early part of 1915 this growth in exports was reflected in the decline of all the exchanges on the New York market.

(b) *During the "Peg"—*

Sterling was "pegged" in New York through the large borrowings by Great Britain and the resale of American securities and the shipment of gold. These factors stabilized the Allied exchanges at an artifically high level. In the free exchange markets of the neutral countries of Europe, the Allied currencies depreciated to their natural level, for the large excess of imports by the Allied countries was not offset by the exportation of gold and securities. It then became profitable to buy the Allied exchanges, chiefly sterling, at their depreciated values in the neutral markets of Europe and to sell them at the higher prices prevailing in the stabilized market in New York. Or neutral dealers could sell sterling in London for dollars and sell the dollars in New York. The resulting abundance of dollar exchange naturally caused its depreciation. During the entire period of our belligerency and until the "peg" was released neutral exchanges were at a premium in New York, as shown above.

Erroneous explanations were offered for the appreciation of neutral exchange in New York.[20] It was said that "the dollar

[20] Harvard Review of Economic Statistics for July, 1919, "Balance of Trade of the United States," p. 244, footnote 1 refers to the "unfavorable balance of trade of the United States in the neutral markets."

went to a marked discount in neutral markets after our entry into the war chiefly because our balances in these countries were unfavorable to us." This explanation is obviously incorrect. After our entry into the war the United States had an excess of exports in its trade with all the neutral countries of Europe except Switzerland, as shown in the table herewith. It is only in our trade with the South American countries that we had an excess of imports.

FOREIGN TRADE OF THE UNITED STATES WITH CERTAIN FOREIGN COUNTRIES [21]
Excess of exports (+) or of imports (−)
(in million dollars)

Country	1913	1914	1915	1916	1917	1918	1919
United Kingdom	+311.9	+304.9	+888.8	+1498.2	+1586.2	+1834.4	+1857.5
France	+ 15.0	+ 65.9	+422.9	+ 751.9	+ 842.2	+ 871.7	+ 769.5
Italy	+ 23.3	+ 42.7	+218.2	+ 243.3	+ 382.6	+ 467.8	+ 383.6
Russia	+ .36	+ 10.0	+123.4	+ 305.3	+ 302.9	+ 2.1	+ 27.3
Denmark	+ 16.1	+ 38.1	+ 70.8	+ 53.3	+ 31.4	+ 10.6	+ 157.8
Sweden	+ 1.7	+ 19.2	+ 73.9	+ 29.1	+ 2.4	+ 9.7	+ 119.3
Norway	+ 0.8	+ 7.7	+ 39.2	+ 59.8	+ 56.6	+ 34.1	+ 127.8
Netherlands	+ 83.9	+ 63.2	+114.5	+ 70.1	+ 30.0	+ 2.5	+ 179.6
Spain	+ 6.4	+ 5.8	+ 27.0	+ 31.7	+ 54.7	+ 50.7	+ 53.3
Switzerland	− 23.5	− 20.7	− 13.9	− 8.8	− 0.4	+ 10.7	+ 48.5
Germany	+167.7	+ 8.9	− 33.2	− 3.6	− 0.2	− 0.3	+ 82.2
Austria	+ 3.1	− 2.9	− 5.2	− 0.6	− 0.1	− 0.1	+ 39.8
Argentina	+ 29.4	− 29.1	− 41.8	− 39.4	− 71.2	− 123.3	− 43.3
Brazil	− 61.0	− 71.7	− 86.1	− 84.4	− 79.1	− 40.6	− 118.9
Chile	− 12.9	− 10.6	− 19.5	− 48.7	− 85.0	− 99.7	− 29.3

The correct explanation [22] is that the neutral currencies appreciated in the New York market because the United States bought more of the neutral currencies from Great Britain than it sold to Great Britain, and because the neutrals sold more sterling in New York than they bought there. In other words, because of the inter-Allied financial unity the aggregate of Allied exports was less than the aggregate of Allied imports. This will be treated more fully in the discussion of the mechanism of stabilization of exchange.

The appreciation of the Scandinavian exchanges in New York was due in part to the large credits due the Scandinavian countries on account of shipping. Norway's credit on this account amounted to 120 million kroner in 1910, about 220 million in 1913, about 475 million in 1915, and to 1063 million kroner in 1916.[23]

[21] Statistical Abstract, 1919.
[22] Report of the Federal Reserve Board for the year 1918, p. 53, *et seq.*
[23] Stavanger Aftonblad, June 14, 1918.

Another factor in raising the New York exchange rates of the European neutrals was the restriction by neutrals on gold settlements. For instance, although at parity a dollar is equal to 5.18 pesetas, the Bank of Spain refused to accept American gold at more than 5.03 pesetas. This discount on gold in Spain accounts for part of the premium on pesetas in New York. Again the Scandinavian countries at first purchased gold at a discount of about 5 to 6 per cent and subsequently put an embargo on gold imports. The acute shortage of goods in the neutral countries of Europe caused a rise in prices which was aggravated by the increase in the quantity of gold. The desire to avoid this so-called gold inflation accounts partly for the appreciation of the neutral exchanges. The theory of the neutrals in both cases was that their credits ought to be settled by imports of merchandise.

(c) *After the Release of the "Peg"*—

Upon the discontinuance of the stabilization of sterling exchange in the New York market the normal play of economic forces again became apparent. The United States had a large excess of exports, embargoes on goods were removed, gold was again free to flow, and the currencies of the European neutrals fell to an ever-increasing discount. Only the South American currencies, as shown above, temporarily maintained their premium in the New York market. The reason was obvious. The United States had an excess of imports from these countries.

ii. *Fiscal Factors*

The commercial factor accounts for the daily variations in exchange rates. A large offering of bills may cause a violent break in the market. But exchange rates also respond, though not so sensitively, to the depreciation of the currency. To use an analogy, the currency factor corresponds to the climate, the commercial factor corresponds to the weather. Usually both the commercial and the currency factors produce the same results, for during a period of borrowing or excessive issue of paper a country usually has an excess of imports. During and since the war the countries of Europe lacking raw materials have had a large excess of imports, and at the same time a depreciating currency. If these countries had increasing exports the currency situation would

gradually improve. This condition obtained in the United States after the Civil War.[24] However, sometimes the two factors operate in opposite directions. For instance, during the period from March to April, 1920, German exchange was rising on all the markets of the world in spite of the fact that the circulation of banknotes increased from 48 to 56 billion marks. But this was due to a peculiar condition.

The depreciation of exchange rates, however, is not an accurate measure of the decline in the ratio of gold to notes. Following are the figures for Germany:

Date	Ratio of gold to total note issues	Rates of exchange cents per mark
June 30, 1920	1.4 per cent	2.65
June, 1914	59.6 per cent	23.80
Ratio of post-war to pre-war figure	2.4 per cent	11.1 per cent

A comparison for France shows a similar result.

Date	Ratio of gold to total notes	Rates of exchange cents per franc
November 11, 1920	8.2 per cent	5.88
June, 1914	59.5 per cent	19.30
Ratio of post-war to pre-war figures	13.6 per cent	30.5 per cent

The exchange rates, depreciated as they are, do not measure the full extent of note inflation. External depreciation is less than inflation of currency. This difference may be due to the fact that the large volume of gold before the war could have been reduced considerably without impairing the convertibility of the paper money. Theoretically if visible and invisible imports balanced exports exactly and if gold flowed freely the depreciation of exchange rates would equal the premium on paper money. The fiscal causes of exchange depreciation are closely connected with the commercial causes. Fiscal factors, such as the issue of notes

[24] Hepburn, A. B., History of Currency, 1915 ed., pp. 226, 227. See also Mitchell, Wesley C., History of Greenbacks.

by the state, and monetary factors, such as the free circulation of gold coins regulate relative international price levels in gold. Relative price levels determine the flow of trade. As noted above, a regime of inconvertible paper usually follows a period of heavy foreign borrowing and of inflation of the currency. Such was the case both in Argentina in the latter half of the nineteenth century and in the belligerent countries of Europe during the World War. The correctives of exchange, discussed above, apply chiefly when depreciation is due to commercial factors.

iii. *Political and Other Factors*

There are other causes of exchange fluctuations. The fortunes of war had a decisive effect. When the United States entered the war in 1917, francs and lire rose on the world markets but marks and Austrian kronen declined. In the fall of 1917 the successful Austrian campaign against Italy, followed shortly by the complete defeat of Russia and Rumania by Germany, led to a sharp rise in German and Austrian exchange. The signing of the Treaty of Brest-Litovsk and the German offensive in France in the spring of 1918 maintained these exchanges at a high level until the summer. The spirited fighting of the fresh American troops, the turning of the tide at Chateau-Thierry, and the successful counter-offensive by Foch marked the beginning of a rapid and continuous decline of these exchanges. From a quotation of about 70 per cent of parity in the spring of 1918, marks fell to about 50 per cent at the signing of the armistice. Austrian kronen fell from a quotation of about 55 per cent of parity to about 31 per cent in the same period.

Similarly the neutral exchanges declined in New York upon the entry of the United States into the war and likewise declined very rapidly from their high levels in the summer of 1918, following the successful offensive against the Germans. In this period the premium on Swedish kroner declined from about 37 per cent to about 7 per cent, Dutch guilders from a premium of about 28 per cent to 3 per cent, and on Swiss francs from about 31 per cent to 3 per cent.

Other factors influencing exchange rates were the adoption of measures to increase taxes and other revenue, the flotation of war loans, the increase of note issues, the gain or loss in gold,

in short all events of political or social importance, including rumors and psychological factors which affect the future balance of trade, and the convertibility of the depreciated paper.

D. The Effects of Depreciation of the Foreign Exchanges

The depreciation of the foreign exchanges causes instability of trade. Some economists have held that both commercially and financially a falling exchange tends to correct itself. Others have held the opposite view. The difference of opinion, however, is reconcilable because the two opposite effects observed are due to two separate sets of causes.

i. *The Self-Corrective Effect of Depreciation*

(a) *Commercial Self-Correctives*—

1. Exports are fostered—A depreciated exchange tends to foster a country's exports and to check its imports. For instance, the decline of Danish exchange in New York after the release of the "peg" caused a heavy shipment of butter, eggs and potatoes from Denmark to the United States in spite of the fact that all of these foods were in great demand in Central Europe. Danish exchange stiffened as the result of the demand to pay for the imports.[25] Similarly Spanish onions, Asiatic peanuts, Irish potatoes and cabbage from the neutral countries of Europe began to compete with the American products owing to the decline in exchange in the early part of 1920. Again, in competition with both Belgium and Great Britain, Germany was a successful bidder on a large French order for locomotives, in spite of the fact that the French would have preferred to trade with their former Allies.[26] The decline in German exchange on the French market gave the German exporter a temporary bounty which stimulated exports and thus tended to correct the falling mark. The fall of the mark in the autumn of 1919 and in the early part of 1920 brought a host of foreign buyers into Germany to take advantage of the so-called "clearance sale." The heavy exports tended to check the fall and in the spring of 1920 the mark rose, owing in part probably to the increase of exports (and in part to the speculative purchases of German securities by foreigners).

[25] New York Times, January 3, 1920, and December 9, 1920.
[26] Journal of Commerce, December 1, 1920.

The self-corrective effect of the declining exchanges of Europe led to legislative proposals. For instance, the woolen manufacturers, testifying before the Ways and Means Committee of the House,[27] proposed measures to prevent the falling exchanges from correcting themselves. A law was recommended to "normalize exchange by levying a tax of the difference in cost between goods imported under the current and under the normal rate of exchange." The law contemplated assessments not at the depreciated rate but at the normal rate of exchange. Furthermore, to prevent dumping of foreign goods, whether dutiable or not, the federal government was urged to collect an "equalizing charge" or the difference between the amount payable at the current rate of exchange and at the normal rate. This petition is similar to that of the associations of Swedish and of Swiss industries to the respective Ministers of Finance for protection against the competition of German manufacturers who were favored by the depreciation of the mark.

2. IMPORTS ARE CHECKED—The decline of the exchanges on the New York market led to a restriction of imports into the several countries from the United States. The Association of Boot and Shoe Manufacturers of Brazil passed a resolution to discontinue imports of leather from the United States until the American dollar declined to parity, or the Brazilian milreis rose to parity.[28] Again, the depreciation of the Canadian dollar in the United States induced curtailment of Canadian purchases in the United States. The Canadian Wholesale Grocers' Association favored the discontinuance of purchases in the United States, and the Board of Trade, the bankers', wholesalers' and consumers' organizations of Winnipeg urged discrimination against American products to reduce Canadian imports in order to raise the level of the Canadian dollar in the New York market. At the same time they advised a preferential for British goods because of the depreciation of sterling.[29] The depreciation of Belgian exchange checked imports from the United States and to a less extent from Great Britain, and stimulated imports from Germany.[30]

[27] December 8, 1920.
[28] Journal of Commerce, December 2, 1920.
[29] Associated Press despatch, Toronto, February 7, 1920, and Winnipeg, February 6, 1920.
[30] Report of Trade Commissioner C. E. Herring, Commerce Reports, October 29, 1919.

3. EXPLANATION[31]—What is the explanation of this phenomenon? Is it that the depreciation of the exchange of a country acts as a bounty to its exporters and a burden to its importers? This would be true if the price level within the country were no higher than when exchange was at parity. A truer explanation is that the depreciation of exchange rates keeps pace with the rise in the price of gold but that the general price level lags behind. As a result the exporter from a country with depreciated exchange buys at the general price level, and sells to the foreigner at the equivalent of a higher price level. The profit to the exporter arises from the re-conversion of the foreign stable currency into his own depreciating currency. Naturally the demand for goods for export tends to make prices rise and until the general price level reaches the export price level a profit on exchange accrues to the exporter. But the depreciation of the exchange of a country raises the price in its own paper money of imports of food and raw materials, therefore wages and other costs of production subsequently rise toward the world level and this profit to the exporter diminishes. The equalization of price levels eliminates the self-correctives. Until the stage of equilibrium is reached the fall of the exchange is a burden upon the less mobile factors in the cost of production, such as rent, overhead, and most of all labor. That is, the lag in the rise of wages below the rise in cost of living, which depends upon imported goods, constitutes a profit to the exporter, but a burden to the wage earner.

(b) *Financial Self-Correctives*—

The depreciation of the exchange of a country is a financial self-corrective as well. It induces the resale of its holdings of securities of other countries whose exchange is not depreciated. For example, when sterling depreciated in New York, Englishmen resold their holdings of dollar securities and obtained more sterling than they loaned. Of course, if the securities were payable not in dollars but in sterling this effect would not be evident. Before the United States entered the war this method of correcting the declining exchanges of the Allies was in effect. As shown below about 56 per cent cent of the British holdings of American railroad securities were liquidated in New York between January,

[31] For fuller discussion see article by John H. Williams, Annals of the Academy for Political and Social Science, May, 1920, pp. 200, *et seq.*

1915, and January, 1917. During the period of our belligerency the United States government advances eliminated the need for such a corrective. But after the release of the "peg" the depreciation of sterling in New York induced another wave of selling, whereby Britishers obtained a premium on the sale of the international securities, the stocks and bonds listed on both the New York and European stock exchanges. As a result of the pressure of sales by foreigners in the New York market, many common stocks which had a long unbroken record of dividends sold at far lower prices in 1920 than at quotations during 1914 or even the week prior to America's entry into the war.

The depreciation of exchange of a country tends to make it borrow in those countries whose exchange is at gold parity. The heavy borrowings during 1919 and 1920 by the countries of Europe, both belligerent and neutral in the World War furnish ample evidence of this tendency. As the depreciation of exchange is wiped out the borrowers profit on the operation, provided the loan was made in the currency which remained at gold parity. Furthermore, the investors of a country whose exchange is at gold parity are induced to buy the securities or the currency of a country where exchange is depreciated in the speculative expectation that exchange will rise and give the investor a larger return upon reconversion into his own currency. Similarly these investors will leave their bank deposits in the country whose currency is depreciated, and will sell their foreign holdings, bank deposits and short-term bills as the depreciated currency rises. This selling has the effect of checking a rise. This result may be minimized by converting the holdings of currency or of short-term bills into long-term bonds, whose maturity date is fixed beyond the period when the exchanges are likely to be in acute depreciation.

ii. *Denial of the Self-Corrective Effects of Depreciated Exchange*

(a) *Commercial—*

There are economists who hold that a depreciating exchange does not tend to correct itself. J. M. Keynes did not find that a depreciated exchange acted as a bounty to British Indian exporters. Again, after the World War the depreciating exchange in Germany not only did not check imports but it stimulated imports, even of luxuries. The champagne purchases during 1920 were

the largest in the history of Germany. The Minister of Finance Herr Wirth, bewailed the huge imports of chocolates, wines and other articles of luxury. This extravagance, however, affected not only imports but also articles of domestic production. Whether as a result of five years of abstinence and restraint or of the rapidly diminishing purchasing power of the mark, luxuries were consumed in great quantities and display was rampant. Again, even in Great Britain the relatively small depreciation of sterling did not check imports, because after all the largest share of the imports consisted of goods needed. The effect of depreciating exchange then is merely to increase the cost of essential imports.

Again, it is held that depreciating exchange does not stimulate exports, because as the exchange depreciates prices within the county likewise rise to the world price level and thus eliminate the differential.

(b) *Financial*—

There are similar denials that a depreciating exchange tends to cause borrowing abroad or the resale of holdings of securities of countries whose currency is at gold parity. According to newspaper despatches [32] French investors did not sell dollar securities in order to get more francs as the market depreciated, and thus by selling dollars or buying francs to correct the exchange. Instead it was said that they bought dollar securities, and sold francs on a rapidly depreciating market. Similarly the so-called "flight of capital" from Germany, while it may have been induced by oppressive tax measures, was in part due to the rapid decline in value of the German mark. Germans sold marks on the declining market and bought the currencies of neutral countries and of the United States in order to arrest the continuous diminution of their wealth.

The marked decline of the Austrian kronen led to panic sales of kronen and to the purchase of foreign securities. As a result the depreciated kronen declined still further.[33] The purchase of foreign securities is not confined to the countries where the currency is greatly depreciated. Even Dutch investors, small farmers as well as city capitalists' bought American currency and securities.[34]

[32] Associated Press, March 22, 1919.
[33] New York Times, December 20, 1920.
[34] Dispatch to New York Times, November 9, 1920.

iii. *Reconciliation of the Apparently Conflicting Facts*

(a) *Commercial vs. Fiscal Causes of Depreciation*—

The two tendencies, though apparently contradictory, are reconcilable. If the depreciation is due to an excess of imports a decline of exchange undoubtedly has an effect on trade. It checks imports and stimulates exports. Likewise, the financial effect is to stimulate borrowing in the country whose exchange is at or near parity and reselling to that country of the securities issued in the stable currency. If however the depreciation is due to a rapid increase in the volume of the currency then the opposite effects are noted. Imports, particularly of luxury articles, are accelerated.

A depreciating currency fosters extravagance because holders wish to get rid of it before it rots on their hands. They convert it into anything which depreciates less rapidly. No distinction is made between domestic goods and foreign goods. A similar financial effect follows. Holders of a rapidly depreciating currency will invest it in diamonds bought at home or in securities bought abroad, or in any value, domestic or foreign which will not waste away as rapidly as the depreciating currency.

These anomalous phenomena are in part due to the fact that gold is not publicly and freely quoted in terms of depreciated paper, and that the flow of gold as a corrective of the exchange is restricted. The wide fluctuations of exchange, the unsettlement of trade, and the failure of a depreciating exchange quickly to correct itself are the price that the governments of Europe are paying for the failure to recognize a premium on gold and to permit gold to flow freely.

(b) *Relation Between Fall of Exchange and Rise of Prices*—

The fall in exchange rates bears a close relation to the rise in internal prices. The foreign exchange value of the depreciated currencies and the rise in domestic prices both indicate the lowered purchasing power of paper money. The foreigner as well as the native makes a guess as to the diminution in value of depreciated paper money. The experts at the Brussels Financial Conference prepared a table to illustrate the relation between exchange rates and prices. Since the United States is a free gold market, prices in the United States may be regarded as gold prices. The United States index number of 1913 is taken as a basis of 100. The

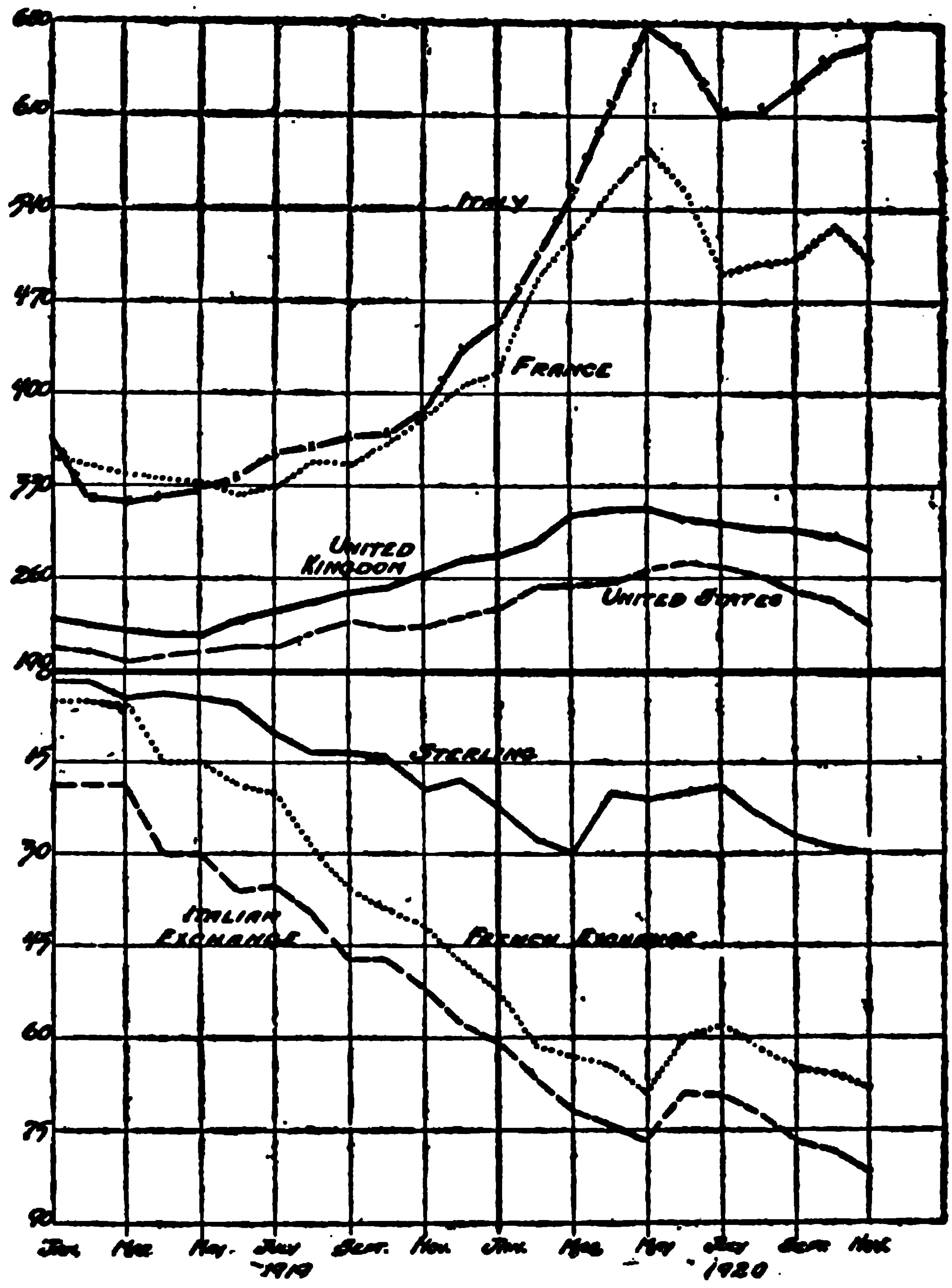


FIGURE XXI

MOVEMENT OF FOREIGN EXCHANGES ON NEW YORK AND OF COMMODITY PRICES IN FOUR COUNTRIES

Prices, above heavy line, based on 1913 average as 100. Exchange rates, below heavy line, in terms of depreciation from parity

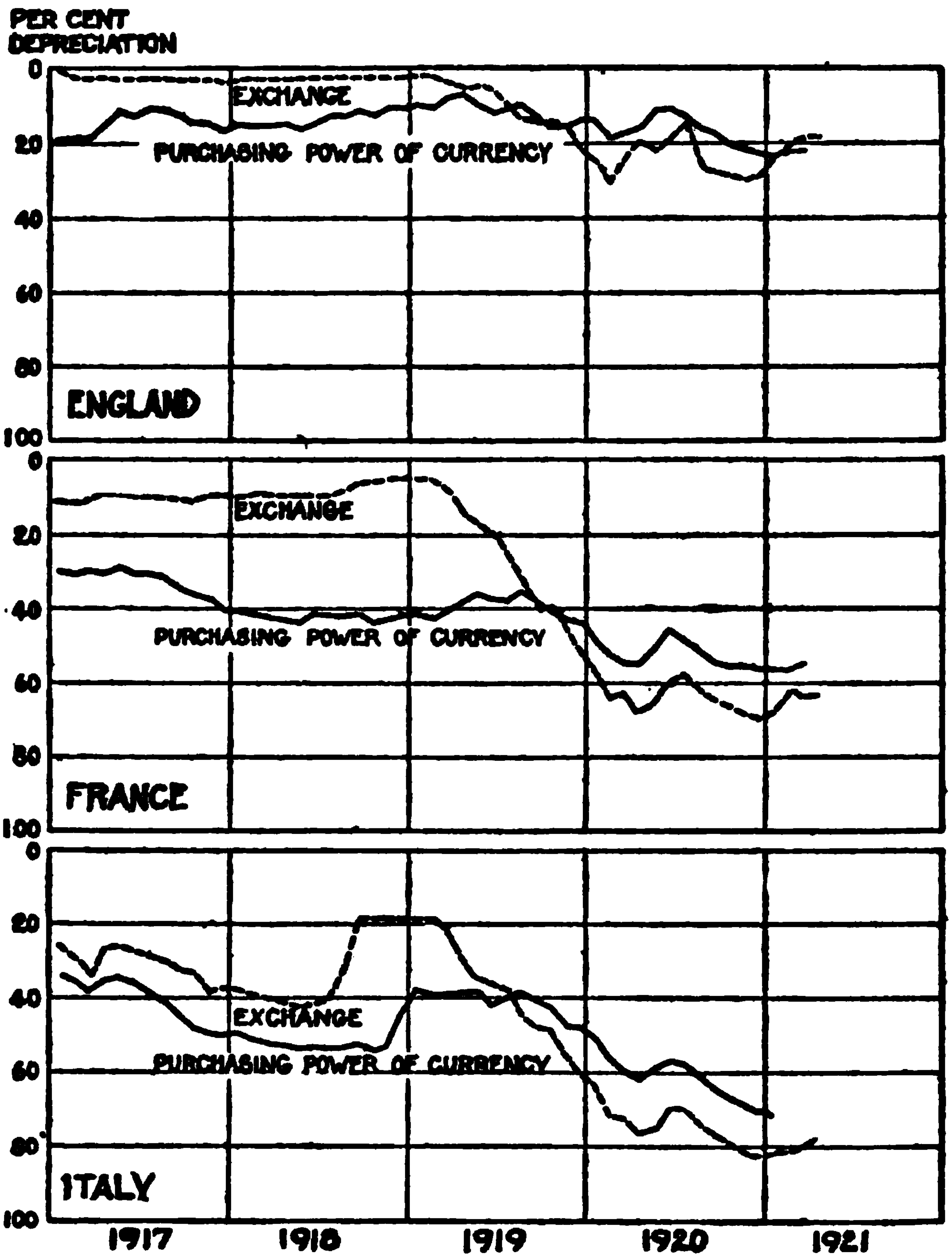


FIGURE XXII

DEPRECIATION OF FOREIGN EXCHANGE FROM PAR AND DEPRECIATION OF THE PURCHASING POWER OF FOREIGN CURRENCIES FROM THE PURCHASING POWER OF THE DOLLAR

The zero line represents the value of the dollar and the figures for exchange and purchasing power are plotted as percentages below full dollar value

relative cost of dollars in foreign currencies is based on gold parity as 100. The external price index of the several countries obtained by multiplying the gold price index in the United States by the relative cost of the dollar in the foreign currency, gives the relative cost in foreign currency of American commodities. For comparison, there is given the domestic price or the cost at home in the native currency, using the 1913 index number of each country as a base of 100.

The table indicates that both the domestic price level and the depreciation of the exchange rates reflect proportionately the depreciation of the currency. Differences existing between them may be due to the differences in the constituents of index numbers, the hoarding of notes, etc.

Comparison of the Domestic Purchasing Power of Certain Currencies and Their Purchasing Power in the United States [35]

Country	United States index number. 1913=100 (*a*)	Relative cost of dollars in foreign currency. Parity=100 (*b*)	External price. Cost in foreign currencies of commodities in United States. 1913=100 (*c*)=(*a*)×(*b*)÷100	Internal price. Cost at home in native currency. 1913=100 (*d*)
December, 1919				
Italy, lire	238	256	609	457
France, francs	238	210	499	425
United Kingdom, sterling	238	129	308	277
Sweden, kroner	238	125	298	317
Canada, dollars	238	108	258	238
Japan, yen	238	99	235	289
May, 1920				
Italy, lire	265	424	1124	679
France, francs	265	319	845	553
United Kingdom, sterling	265	126	334	313
Sweden, kroner	265	125	331	354
Canada, dollars	265	109	289	261
Japan, yen	265	100	265	301

[35] Currency Statistics, Paper III of the Brussels Financial Conference, Table 5, p. 41.

The tables show that the countries ranged in series under column (*c*) would correspond to a series under column (*d*). The country with the highest rise of internal prices likewise shows the greatest depreciation of exchange. In general external prices rise higher than domestic prices where gold does not flow freely. This means that the exporter who bought at the domestic price level and sold abroad at the higher foreign price level enjoyed the so-called "bounty" resulting from depreciating exchange. However in the two countries, Japan and Sweden, which did not restrict the movement of gold after the war, external prices rose less than internal prices. Or the depreciation of exchange rates was less than the decline of the purchasing power at home.

iv. *The Unsettling Effect of Unstable Exchange Rates*

(a) *Commercial*—

The rapid and extreme fluctuations of exchange made foreign trade operations highly speculative. To eliminate the element of unstable rates, traders reverted to barter. For instance, France, traded coal from the Saar Basin for a variety of German products. Similarly Belgium and Rumania traded coal for corn. Great Britain and Czecho-Slovakia traded coal for enamelware. In these transactions no monetary unit was taken into account, a specific quantity of one commodity was exchanged for a specific quantity of the other.

Raw materials were also bartered for the resulting finished goods. This so-called "refining trade" was part of a credit scheme under which raw materials would be shipped to Germany. The foreigner furnishing them would retain a lien on the goods in process which became increasingly valuable and thus added to the security.

(b) *Financial*—

The depreciation of the foreign exchanges in New York unsettled the international market for securities. As the exchanges of the countries of Europe declined their internal loans held in the United States fell in value. Interest in the depreciating currency was collectible in dollars only at a considerable loss. In many cases it was not immediately converted into dollars but remained as a floating debt, usually converted on a temporary

rise in the exchange market and thus checking the improvement. The risks of further declines in exchange discouraged American investments in internal loans of the European governments. To avoid this difficulty foreign governments floated loans at high rates of interest, payable in dollars, or in a few cases payable at the option of the holder either in dollars or in the foreign currency, at a graduated percentage of the improved value of the exchange.

v. *The Increased Importance of Dollar Exchange*

Dollar exchange increased in importance because the United States became now the chief free gold market of the world. Therefore the depreciation of the exchanges in New York was a measure of the discount on paper money or the premium on gold.

(a) *Wider Arbitrage Transactions*—

Before August, 1914, the arbitrage operations of American dealers in foreign exchange were confined practically to the three principal currencies of Europe, sterling, francs, and marks. Other exchange was purchased almost entirely through London. Since the war American dealers in foreign exchange have conducted arbitrage operations with practically every country in the world.

(b) *Development of Dollar Exchange* [36]—

Another indication of the growth of dollar exchange is the huge volume of transactions in dollars. From February 20, 1918, to December 31, 1918, the dollar exchange furnished on Allied account amounted to $26,000 million, due chiefly to United States government loans. The aggregate debits and credits in dollar exchange operations with European countries, other than the Allies, was about $2500 million, with countries in Asia $2800 million, with countries of South America $1900 million, with Central America, Mexico and the West Indies $2300 million. Many countries bought goods in the United States with dollars accumulated here rather than with sterling, as before the war. Many of these transactions represented the purchase and sale of securities in the United States for the account of foreigners. Furthermore, as the neutral countries accumulated balances in the United States which could not be liquidated through the exportation of gold during the embargo they purchased foreign securities, chiefly

[36] Annual report of Federal Reserve Board for the year 1918, p. 56.

British. Purchases of securities in the United States for foreign account in the ten months ending December 31, 1918, totaled about $400 million, and the sales for foreign account about $350 million. The excess of purchases over sales were of American, British and French securities. At the end of the year the securities held in America for foreign account amounted to $1800 million and the securities held abroad for American account amounted to $97 million.

E. The Correctives of Foreign Exchange

The several factors which tend to correct depreciated exchange, according to economic theory, were operative during the war. From January, 1915, to June, 1917, Europe shipped gold to the United States aggregating $1255 million. Again, Europe resold to the United States securities which had been exported before the war. The amounts resold were estimated at about $2000 million. Again, loans both secured and unsecured amounting to about $2800 million were raised by the Allied Powers to pay for their excess of imports and thus to correct their exchanges. Finally, after April, 1917, the United States government extended advances totaling about $9500 million. To help control the daily fluctuations in the market a fund of about $50 million was made available in London by a group of New York bankers.

i. *Commodity Movements*

(a) *During the War—*

After the entry of the United States into the war it became necessary to maintain the purchasing power of the Allied governments in the United States, and in the neutral markets of the world. Although the United States Treasury did not take any steps in the actual support of sterling, francs and lire in New York it maintained a sympathetic attitude toward the "pegging" operation. As a result of inter-Allied financial unity the excess of exports of the United States was no longer the chief factor in determining the position of the dollar on the markets of the world. The Allied and Associated Powers, the United States, Great Britain, France, and Italy, had effected a financial unity and their several exchanges were determined no longer by the factors affecting each individual country, but by the sum total

of the international debits and credits affecting the entire group. The dollar depreciated sympathetically with the Allied currencies.

Normally the exchanges would have corrected themselves by stimulating exports and checking imports. But commercial considerations had to yield to military necessity and as a result the normal correctives were not operative. The need for shipping facilities in the Atlantic lanes, the blockade of the Central Powers and of the neighboring neutrals, made international trade settlements difficult. As a result of the inter-Allied financial unity the balancing of their international debits by means of exports was equally effective in stabilizing dollar or sterling exchange, whether these exports were made by the United States or by any Allied power. But the need for tonnage to carry war supplies from the United States made it difficult to provide additional shipping for non-military supplies to those European neutrals that had no tonnage of their own. Although the Allied powers were importing vastly more than they were exporting and therefore they had ample tonnage for such exports as they were able to make, yet the blockade of the enemy powers restricted exports to the neighboring neutrals. On the other hand exports to distant parts of the world was made difficult by the general shortage of tonnage.[87] Therefore, the flow of commodities could not correct the depreciated exchange of the Allies.

(b) *After the War*—

The release of the "peg" disrupted the inter-Allied unity. As a result the monthly returns for the powers that had a large excess of imports during 1919 showed a gradual decrease during 1920. The excess of imports from the United States into four formerly belligerent countries of Europe for the years 1913, 1918, 1919 and 1920 was as follows:

EXCESS OF IMPORTS FROM THE UNITED STATES
(in million dollars)

Country	1920	1919	1918	1913
United Kingdon	1311	1969	1913	319
France	510	770	872	15
Italy	296	384	468	23
Belgium	235	370	155	23

[87] Report of the Secretary of the Treasury for the year 1918, p. 38.

When the United States loans were discontinued the nations of Europe could no longer settle for their excess of imports by borrowing. They had to settle for it by exports. And in a large measure they did.

ii. *Flow of Gold*

(a) *Prior to the War*—

A study of the balance of trade of the United States shows that gold flows into a country in settlement of its international credits, and that gold flows out of a country in settlement of its international debits. The gold flow, however, does not exactly balance the flow of commodities. Other relevant factors are shipping, interest on invested capital, and the minor items in the international balance.

THE BALANCE OF SHIPMENTS OF MERCHANDISE AND GOLD [28]
(in million dollars)

Period	Excess of Merchandise		Excess of Gold	
	Exports	Imports	Exports	Imports
1821–1837	....	185	....	37
1838–1849	34	....	....	36
1850–1873	....	1541	1098	
1874–1895	2493	....	202	
1896–1914	9262	....	....	174

If the only factors in international trade were merchandise and gold, an excess of exports of merchandise would be balanced by an excess of imports of gold. However, in the period 1821–1837 our net imports were more than offset by our shipping earnings, therefore our international balance on this account was liquidated by net imports of gold. In the period 1838–1849 net merchandise exports were offset by net gold imports, and in the following period merchandise imports were offset by gold exports. In the period 1874–1895 there was an excess of exports of commodities and instead of net imports of gold we had net exports, which paid for interest and principal of the growing debt of the United States to Europe. In the period 1895–1914 there was a very large excess of merchandise exports and only very small offsetting net gold

[28] Balance of Trade of the United States, by Bullock *et al.*

imports, the difference being settled by debits of the United States for services, such as shipping and banking, by immigrants' remittances, and by the expenditures for travel of growing numbers of Americans.

(b) *Flow of Gold During the War*—

The imports and exports of gold, both by years and by months during the period 1914-1918 are particularly significant in connection with the exchanges.

UNITED STATES GOLD MOVEMENTS BY YEARS [20]
(in million dollars)

Year	Exports	Imports	Excess of exports	Excess of imports
Fiscal year:				
1914	112	67	45	
1915	146	171	....	25
1916	90	494	....	404
1917	292	977	....	685
Total July 1, 1914–June 30, 1917	640	1709	45	1114
1918	190	124	66	
Calendar year:				
1918	41	62	....	21
1919	368	76	292	
1920	322	429	....	107
Totals from Aug. 1, 1914—				
To Nov. 10, 1918	703	1773	....	1070
To Dec. 31, 1918	705	1776	....	1071
To Dec. 31, 1920	1395	2282	....	886

1. BEFORE THE BELLIGERENCY OF THE UNITED STATES—For the purpose of studying the flow of gold the period of the war must be divided into two, namely: the period before the century of the United States and the period of its belligerency. From July 1, 1914, to June 30, 1917, three fiscal years, the United States imported net $1114 million in gold. The gold came from Europe, chiefly the belligerent Allies who had to settle for their excess of imports not only with the United States but also with the neutrals of Europe. These countries, like the United States, also had large net gold imports.

[20] U. S. Statistical Abstract, 1919.
Federal Reserve Bulletin, November, 1920.

MONTHLY GOLD MOVEMENTS IN THE UNITED STATES SHOWING NET EXCESS OF IMPORTS AND EXPORTS

(in million dollars)

Source: Monthly Summary of Foreign Commerce, December, 1914–1919

Month	Net Excess of—		Net Excess of—		Net Excess of—	
	Exports	Imports	Exports	Imports	Exports	Imports
	1914		1915		1916	
January	...	4	...	6	...	5
February	6	...	...	12	8	
March	...	5	...	25	1	
April	...	3	...	15	5	
May	15	...	...	30	...	15
June	44	...	...	50	...	114
July	30	...	...	15	...	53
August	15	...	...	60	...	− 29
September	19	...	...	40	...	86
October	44	...	...	77	...	90
November	7	...	...	57	...	21
December	...	4	...	34	...	131
Total	180	16	0	421	14	544
Year's excess	164			421		530
	1917		1918		1919	
January	...	38	...	1	1	
February	...	82	2	...	...	1
March	...	122	1	...	...	6
April	...	15	1	...	...	5
May	5	...	...	3	1	
June	...	24	...	29	57	
July	42	...	4	...	53	
August	27	...	2	...	43	
September	27	...	...	...	28	
October	7	...	1	...	39	
November	4	...	1	...	49	
December	2	...	...	...	33	
Total	114	281	12	33	304	12
Year's excess	...	167	...	21	292	

After the entry of the United States into the war, the government advanced credit to the Allies. These advances obviated the need for further gold imports from the Allied Powers in settlement of huge balances of exports from the United States. During the stabilization of the Allied exchanges, the neutrals of Europe tried to settle their debits against the Allied Powers in the New York exchange market. As a result the neutrals were able to draw gold from New York in settlement of their excess of exports to the Allied Powers. During the three months July, August and September, 1917, the neutrals withdrew about $100 million in gold from New York, and thus compelled the United States to declare an embargo on gold exports.

2. THE FLOW OF GOLD UNDER THE EMBARGO—The flow of gold to New York, which had been fairly continuous until the early months of 1917, slackened then. The Allied Powers had exported so much gold in settlement of their adverse balances of trade that they restricted the movement of gold, and thereupon gold withdrawals for Allied account narrowed down to the United States market. Because of the resulting heavy withdrawal of gold the President on September 7, 1917, issued a proclamation that "except at such times and under such regulations and subject to such limitations and exceptions as the President shall prescribe and until ordered otherwise by the President or Congress the following articles, namely: coin, bullion and currency, shall not on and after September 10, 1917, be exported from, shipped from or taken out of the United States or its territorial possessions."[40]

The Federal Reserve Board issued regulations and considered applications governing the exportation of coin, bullion and currency. Travelers leaving the country were permitted to take with them United States paper currency, other than gold or silver certificates to the amount of $1000 per adult, $100 in silver coin in lieu of an equal amount of notes, and gold coin or gold certificates to the amount of $200. The prime reason for the regulations was the belief that United States currency taken into foreign countries by travelers would be absorbed by enemy agents for propaganda purposes.[41] Applications for the shipment of gold to the neutral countries of Europe were refused. However in order to obtain

[40] Report of the Federal Reserve Board for 1917, p. 20.
[41] Annual Report of the Federal Reserve Board for 1918, p. 36.

necessary raw materials from Mexico, South America and the Far East the Board granted permission to ship gold if the imports were essential to the prosecution of the war. In other words, military and not commercial considerations determined the flow of gold.

The embargo on gold removed one of the important correctives of the exchanges and as a result there was a marked depreciation of the dollar on those markets with respect to which the embargo was rigidly enforced, and which held large balances of Allied exchange. Again the embargo increased the gold reserve, and eased the credit situation in the United States. The resulting great expansion made the later deflation in 1920 very acute. The embargo restricted the movement for the extension of American banking abroad. Of course American trade was restricted. These, however, were minor considerations in view of the one outstanding need, a military victory.

The net exports during the period of the embargo from October, 1917, to May, 1919, were only $18 million. The gross exports of coin, bullion and currency under licenses granted by the Federal Reserve Board from September 7, 1917, to June 7, 1919, amounted to about $863 million.

Gold	$152,326,976.37
Silver	502,756,003.44
U. S. currency	166,780,636.72
Currency of the country to which exported	28,762,254.27
Other currency	12,627,800.05
Total	$863,253,670.85

Of the total amount of gold licensed $48 million was exported to Mexico, $17 million to Argentina, $16 million to Chile, $13 million to Colombia, and lesser amounts to Venezuela, Peru, Spain, India, Java and Japan. Of the total amount of silver licensed $339 million was exported to India, $62 million to China and lesser amounts to Great Britain, France, Canada and Mexico. Of United States currency licensed $49 million was exported to France, and lesser amounts to other countries.

(c) *The Flow of Gold After the War*—

1. Lifting of the embargo—On March 18, 1919, Great Britain ceased to support franc rates in London. On March 20, Great Britain instructed J. P. Morgan & Company to cease sup-

porting sterling in New York. A few days later the support of lire in New York was abandoned. These steps relieved the pressure which was being exercised on New York by the neutrals who had exchange of the Allied Powers to sell. The removal of the "peg" tended to restore the normal conditions under which each country settles for its own trade balances. Accordingly the Federal Reserve Board announced that after May 6, 1919, licenses for gold exports would be granted freely, and that after June 9, 1919, the control of exchange and the embargo on gold would be terminated with minor exceptions. The embargo on gold exports to Bolshevik Russia was lifted in December, 1920.

2. THE EFFECTS OF THE LIFTING OF THE EMBARGO—As a result of the lifting of the embargo there was a very large outflow of gold during the rest of 1919, averaging about $40 million per month. From June to December $290 million in gold were exported in settlement of the huge balances against us which had accumulated in the neutral countries. Prior to the removal of the "peg" the neutrals had exchanged their sterling, francs, and lire for dollars, which they held in the expectation of getting gold. Again, a large portion of this gold was sent to South America and the Far East to pay for imports, which were restricted during the war but which were greatly needed in the United States. Because of this accumulated demand the United States had an excess of imports in its trade with South America and the Far East. From January 1, to November 10, 1920, the net gold imports were small, about $107 million, although the gross exports totaled over $428 million. The imports of gold came chiefly from the countries in the trade with which the United States had an excess of exports. During 1920 the United Kingdom shipped in gold $275 million, Canda $35 million, France $49 million. Our outflowing gold was exported to the countries in the trade with which the United States had an excess of imports. Argentina received $90 million, Japan $101 million, China $28 million. Much of the gold imported into the United States was en route to foreign countries to pay the debts of the country from which the gold came originally. France, Italy and Great Britain shipped gold from the United States to settle for their excess of imports from other countries. The United States thus lost gold not only on account of its own excess of imports from certain foreign countries but also on account of arbitrage

transactions. For instance, if in France or Italy dollars were cheaper than another currency for which there was a demand, it was profitable to buy gold with the cheaper currency, dollars, and send it to the country whose currency was dearer in France or Italy. The trade returns for commodities and gold illustrate this. In 1920 there was an excess of commodity exports of the United States to Argentina amounting to $6 million; nevertheless there was an excess of exports of gold from the United States to Argentina of $88.2 million. The excess of commodity imports of the United States from Japan in 1920 was $36.7 million and the excess of exports of gold was $101.3 million. Part of the excess of exports of gold from the United States may have been used to pay British and French balances in Argentina and Japan. The United States may have exported gold in settlement of accumulated dollar balances or maturing dollar debts.

As a result of the lifting of the embargo, the corrective effect of the flow of gold again became apparent, and the dollar rose on all the markets where it had been artificially depressed by reason of the inter-Allied financial unity. However, it did not rise to the same extent in those markets in which the United States had an excess of imports.

iii. *The Resale of American Securities*

One of the large factors in correcting the depreciation of the Allied exchanges was the resale of American securities which had accumulated in Europe since the Civil War. About $2000 million of American securities were returned from August, 1914, to April, 1917.

(a) *Railroad Shares*—

Mr. L. F. Loree, President of the Delaware and Hudson Company, investigated all the 144 American railroads owning more than 100 miles of line, 105 of which reported securities held abroad. From January 31, 1915, to January 31, 1917, $1,518,590,878 par value of American securities were returned, or 56.15 per cent of the total holdings on the earlier date, which amounted to $2,704,402,364. In the half year ending July 31, 1915, 17.78 per cent were returned, in the year ending July 31, 1916, 29.88

per cent, and in the half year ending January 31, 1917, 8.49 per cent of the holdings on January 31, 1915, were returned. In other words the return flow of these securities to the United States declined slowly during the two years.

It is unfortunate that Mr. Loree did not continue his investigation through the period of our belligerency, when United States government advances made it unnecessary for Europe to continue to sell its foreign holdings. Several isolated cases, however, indicate that after the cessation of government advances, and the release of the "peg," the sale of American securities by Europe was resumed on a small scale only. Pennsylvania Railroad common shares were held in Europe before the war to the extent of $75,-350,000. By September 30, 1919, there were returned $64,800,000, or 87.1 per cent of the above amount. However, in the 11 months following the signing of the armistice the sales amounted to only $150,000 par value. During 1917 the reduction in the percentage of railroad stock held in Europe at the outbreak of the war averaged 22 per cent. Between November 1, 1916, and January 1, 1918, the reduction from the amount held on the earlier date was as follows: Pennsylvania 43 per cent, New York Central 35 per

FOREIGN HELD SECURITIES OF THE NEW YORK CENTRAL RAILROAD COMPANY[42]

Bonds and Obligations of New York Central Railroad and Leased Lines

Date	Amount in thousand dollars	Relative figures	Percentage of total outstanding
August 1, 1914	121,871	100.0	18.09
February 1, 1917	31,002	25.4	4.12
February 1, 1919	32,277	26.8	4.21
July 1, 1920	23,207	18.3	3.04

Capital Stock of New York Central Railroad Company

End of year—			
1914	23,800	100.0	10.55
1917	4,868	20.4	1.95
1918	4,554	19.1	1.82
1919	4,062	17.1	1.63
1920	3,711	15.6	1.49

[42] By courtesy of M. S. Barger, General Treasurer of the New York Central Railroad Co.

cent, Baltimore & Ohio 35 per cent, Illinois Central 24 per cent. On January 1, 1918, the percentage of foreign-owned stocks returned since 1915 was very large in the case of a number of roads: Pennsylvania 85 per cent, New York Central 80 per cent, Northern Pacific 70 per cent, and Illinois Central 65 per cent.[43]

The New York Central Railroad Company and leased lines kept a record of the holdings of its bonds and stocks by Europe and British possessions. The tabulation shows a heavy liquidation from the beginning of the war up to the entry of the United States. There was comparatively little liquidation during the period of the war,—in fact the European holdings of New York Central bonds increased, due to the purchase by Scandinavian neutrals. After the release of the "peg" in the early part of 1919 liquidation of the remainder continued, at a rapid rate.

(b) *Industrial Securities*—

No similar investigation with reference to the liquidation of industrial securities was conducted. The report of the British Dollar Securities Committee gives no clue. Professor Bullock and associates estimate that $304 million of industrial securities were returned up to January 1, 1917, assuming that the original figure, used by him and compiled by *The Annalist* is correct, and assuming that the rate of return of industrial securities was the same as that of the railroads.

The figures for the United States Steel Corporation, however, show a variation in the rate of return of common stock held in Europe.[44]

On June 30, 1914, there were 1,274,247 shares of United States Steel common held abroad. This constituted 25.07 per cent of the total amount outstanding. From July 1, 1914, to April 1, 1917, 779,909 shares were returned or 61.3 per cent of the amount held abroad before the war. From April 1, 1917, to December 31, 1918, when United States government advances helped to stabilize sterling, only 2758 shares were returned, or 0.2 per cent of the total amount held in Europe at the outbreak of the war. From January 1, 1919, to June 30, 1920, during a large part of which period the "peg" was released, and gold flowed

[43] Wall Street Journal, January 9, 1918.

[44] Report of the United States Steel Corporation for the quarter ending June 30, 1920.

freely and exchange truly indicated international balances, the amount of common stock returned rose again. In that period of 1½ years 149,013 shares were returned, or about 11.7 per cent of the total amount held abroad at the outbreak of the war. The foreign holdings of the United States Steel Corporation on June 30, 1920, amounted to 342,567 shares or 26.8 per cent of the amount held abroad at the beginning of the war. Analysis of the foreign holdings of preferred stock shows a similar though less striking record.

The following table shows the great extent of the liquidation prior to the advances by the United States government in 1917, the absence of selling during the period of these advances, and the resumption of liquidation after the "peg" was released in March, 1919. The dates respectively indicate holdings at the outbreak of the war, at the entry of the United States, at the armistice, at the release of the "peg," and 1½ years later.

FOREIGN HOLDINGS OF UNITED STATES STEEL SHARES [46]

Date	Common		Preferred	
	Number of shares	Relative figures	Number of shares	Relative figures
June 30, 1914	1,274,247	100.0	312,311	100.0
March 31, 1917	494,338	38.8	151,757	48.6
December 31, 1918	491,580	38.5	148,225	47.4
March 31, 1919	493,552	38.7	149,832	48.0
September 30, 1920	323,438	25.3	118,212	37.8

The foreign holdings of the American Telephone & Telegraph shares show similar results. Between June 30, 1914, and March 31, 1917, about 35.8 per cent of the pre-war holdings of the stock was sold and 72.8 per cent of the New York Telephone Company's First and General Mortgage 4½'s. From March, 1917, to March, 1919, during the period in which sterling was stabilized, the changes were slight. European holdings of the stock increased 1.6 per cent and European holdings of the bonds decreased 2.5 per cent. Between March, 1919, and September, 1920, the selling was resumed and Europeans sold 15.7 per cent

[46] From quarterly reports of the company.

of their pre-war holdings of the stock and 4.1 per cent of their holdings of the bonds.

FOREIGN HOLDINGS OF AMERICAN TELEPHONE AND TELEGRAPH SECURITIES[45a]

Date	American T. & T. Stock		N. Y. Tel. Co., 1st and Genl. Mtge. 4½'s	
	Par-amount in thousand dollars	Relative figures	Par-amount in thousand dollars	Relative figures
June 30, 1914	13,894	100.0	36,316	100.0
March 31, 1917	8,916	64.2	9,867	27.2
December 31, 1918	9,069	65.3	8,968	24.7
March 14, 1919	9,150	65.8		
March 31, 1920	......	......	8,896	24.5
September 20, 1920	6,956	50.60		
September 30, 1920	......	......	7,356	20.6

The self-corrective effect of depreciated exchange is shown in the large percentage of the European holdings of American securities resold during the war. The shares of the porphyry copper companies returned between July 1, 1914, and December, 1917, constituted almost 50 per cent of the foreign holdings at the earlier date. Of the shares of Utah 59 per cent were returned, of Chino 52 per cent and of Ray 30 per cent.[46] During 1917, probably in the early part of the year, before the United States entered the war, 29 per cent of the foreign holdings of American Smelting common were returned.[47]

iv. *Sales of European Securities*

In addition to the liquidation of European holdings of American securities in the New York market, the depreciated exchanges were corrected by means of sales of European securities, for which a market was created both on the New York Stock Exchange and on the curb. These securities, which were issued in foreign currency, fluctuated in sympathy with the exchange rates, even though the American sub-shares and certificates were sold in dollars.

[45a] By courtesy of Walter S. Grifford, vice-president of the American Telephone and Telegraph Company.
[46] Wall Street Journal, December 25, 1917.
[47] Wall Street Journal, January 9, 1918.

(a) *Industrial Stocks*—

The so-called international securities which were traded in on more than one stock exchange in Europe, were sold in New York.

1. ROYAL DUTCH SHARES—In December, 1916, Kuhn, Loeb & Company purchased 74,000 shares of common stock of the Royal Dutch Company for the Working of Petroleum Wells in Netherlands India. The par value is 100 guilders, which at gold parity is equivalent to $40.20. The Dutch shares were deposited with the Equitable Trust Company and against them 222,000 American certificates in dollars were issued. The block sold in this country represented about one-thirtieth of the total authorized issue, which at the date of the introduction into the New York market amounted to 2,000,000 shares. The transaction helped to stabilize sterling in New York.

2. "SHELL" SHARES—On July 23, 1919, Kuhn, Loeb & Company bought 750,000 shares of a par value of £1 of common stock of the "Shell" Transport & Trading Company, Ltd., which is affiliated with the Royal Dutch Company. This amount likewise represents about one-thirtieth of the total ordinary stock outstanding, amounting to 20,000,000 shares. The shares were in sterling and against them 375,000 American certificates in dollars at the rate of one American share for two British shares were issued by the Equitable Trust Company, the depositary for the British shares. In the case of both the "Shell" and the Royal Dutch shares provision was made for arbitrage transactions between the New York and London Stock Exchanges, and for the conversion back and forth of American and British shares. The "Shell" shares, placed in New York four months after the "peg" on sterling was released, helped to correct the depreciated rate of sterling at that time.

3. RAND SHARES—In January, 1920, 150,000 shares of ordinary or common stock of Rand Mines, Ltd., the leading gold-producing mines in the world, were sold in New York by a syndicate headed by Bernhard, Scholle & Company. As in the above cases the British shares were deposited and American certificates issued against them. The basis was 3 American certificates for 5 British shares. This block also constituted a very small fraction, about 7 per cent, of the total issue, 2,125,995 shares. The par value was

5s. and as in the two previous cases dividends were payable at the prevailing rate of exchange.

An interesting feature of the Rand securities is the fact that as commodity prices rose the dividends of this company declined. The dividend rates were as follows: 1909—350 per cent; 1910 to 1913—220 per cent; 1914—200 per cent; 1915—160 per cent; 1916—150 per cent; 1917—145 per cent; and 1918—85 per cent. The decline in commodity prices ought to result in the return of the dividends toward the pre-war level.

4. DE BEERS SHARES—The De Beers Consolidated Mines, Ltd., controls about 80 per cent of the output of the world's diamonds. In January, 1920, Lazard Frères of New York sold 32,000 deferred shares or common stock of this company. The par value was £2 10s. The British shares were deposited with the Central Union Trust Company and against them American shares were issued. The basis was 5 American shares for 2 of the British. This ratio was fixed merely to make the American shares of convenient denominations. In the case of De Beers also the total block sold in New York was very small, about 3 per cent of the 1,000,000 shares outstanding, and the securities likewise were traded in on the London Stock Exchange and the Paris Bourse.

(b) *Internal Bonds of Governments and Municipalities*[47a]—

The depreciation of sterling in New York resulted in the sale there of sterling bonds, of many foreign states and cities in all parts of the world, the market for which had been either London alone or several of European stock exchange centers.

As European exchange depreciated in New York speculation in exchange took the form of the purchase of the internal bonds of European governments and of their cities. At times the purchases amounted to $1,000,000 or more per day. The quotation list of the New York curb on December 31, 1920, included Internal 4½'s of the French Republic, Internal 5's and 6½'s of the Russian Government, and the mark bonds of the cities of Berlin, Frankfurt, Hamburg, Magdeburg, and Vienna. The sales over the counter included a far wider range. One brokerage catalogue (Alfred R. Risse, New York) contained over one hundred kinds

[47a] Proposals to list them on the N. Y. Stock Exchange.
See the Missing Link in International Finance, by Eugene Meyer, Jr., (1921).

of foreign internal securities, for instance, two internal loans of Russia, three loans of Belgium, five of France, five of Italy, six of Great Britain, and 21 of Germany were listed. Again, 15 issues of 7 British cities and over 100 issues of 37 German cities as well as 25 issues of German industrial securities and over 25 issues of the German land mortgage banks were traded in. The decline of the exchanges stimulated the purchase of these securities in the hope that the currencies would eventually return to parity. However, the extreme depreciation of these securities points to the possibility of the devaluation of the unit of currency. Upon the further depreciation of the exchanges, the probability of their return to gold parity diminished and the purchase of securities issued in foreign currencies was checked. Another factor undoubtedly was the threat of drastic taxation, from which the foreign holders of internal securities would not be exempted.

v. *Loans*

(a) *Short-Term Bills*—

1. Under normal conditions—Under normal conditions a country which is temporarily importing and consuming more than it is exporting and producing may borrow money to tide it over the interval. It may either renew its bills or else borrow from third parties. The function of a high discount rate before the war was to attract funds when a country's exchange rate depreciated. Finance bills would be raised between merchants in one country and bankers in another. These international bills were much like the domestic accommodation bills. At a time when no commercial bills are available bankers in one country will draw upon bankers in another and liquidate the debt by remitting commercial bills as soon as exports increase and make drafts available. Importers are thus able to purchase finance bills at a time when commercial bills are not available, and exporters sell bills to the same bankers at times when importers do not need drafts. Such is the normal practice when there is a temporary excess of exports or of imports.

2. Treasury bills—In August, 1917, the British government through its fiscal agents, J. P. Morgan & Company, issued treasury bills in New York for the purpose of stabilizing exchange. Between August, 1917, and November 11, 1918, the total amount outstanding reached a maximum of $84,405,000, and from the

date of the armistice to March 20, 1919, when the "peg" was released, the maximum was $91,055,000. In one week as much as $20 million was sold. The rate originally was 5 per cent, and was subsequently raised by fractions to 6 per cent. The amounts sold ranged from 7 to 8 million dollars weekly, and the period was 60 to 90 days.

On July 31, 1919, the French Treasury authorized a similar arrangement. J. P. Morgan & Company sold 60- and 90-day French treasury bills in weekly amounts of about $5 million, and not exceeding a total of $50 million. The rate was 6 per cent originally and was raised in March, 1920, to 6½ per cent. In neither of these arrangements did the United States Treasury have any direct interest or influence.

Some internal treasury bills of the European belligerents were sold in New York in 1916.

In floating these bills the foreign governments had no intention of retiring them at the maturity date. They intended to refund them. For this reason the Federal Reserve Board[48] opposed the investment of the funds of the member banks in these bills. The Board felt that member banks should keep their resources liquid and not lock up their funds in obligations and investments which, though short-term in form or name, were either by contract or through force of circumstances to be renewed until normal conditions should return. The Board did not feel that it was in the interest of the country that the member banks should invest in foreign treasury bills. However, it disclaimed any intention of reflecting upon the financial stability of any nation. From the point of view of the borrower short-term treasury bills have a serious disadvantage. They mature continually, and cause difficulty in periods of credit stringency. Furthermore, as a floating debt they tend at maturity to depress the exchanges, to correct which they were originally floated. The exchange market was relieved when Great Britain reduced the total amount of her treasury bills in New York to $18 million in December, 1920.

3. BANK BALANCES—At the outbreak of the war the United States was indebted abroad on current account to the extent of about $1000 million. The demand by Great Britain that this indebtedness be liquidated raised sterling exchange to $7.00 on

[48] Press statement November 28, 1916, and Federal Reserve Bulletin, December, 1916.

August 4, 1914. As a result of the large excess of exports the floating indebtedness of the United States was paid off and, further, many American banks opened credits in favor of London. Because of the existence of a free gold market in New York neutral funds were transferred to the United States. The large stock of gold in the United States made likely the redemption of the indebtedness in gold. Because of the stabilization of sterling in New York the neutrals were induced to convert their excessive sterling and franc bills into dollars, which could not be withdrawn during the period of the embargo. When the embargo was lifted and the sterling "peg" released, the exchange of the European neutrals declined in New York and they could not therefore withdraw gold. Their bank balances in New York then were used to correct their declining exchanges.

(b) *Long-Term Loans—*

1. FLOATED BEFORE THE ARMISTICE—An important corrective of the depreciated exchanges in New York was the long-term credit extended to the Allied Powers. The loans to Great Britain and France have been treated in detail in the section on public finance. Germany received no credit in New York with the exception of one small short-term loan for $15 million underwritten by Chandler & Company. The total loans issued in the United States up to December 31, 1918, according to Prof. Bullock and associates, amounted to $1751 million and the amount outstanding on January 1, 1919, was $1689 million.[49]

Probably because he included unannounced issues, held by banks and bankers, Mr. Thomas W. Lamont, of J. P. Morgan & Company, presented much larger totals. According to the records of his firm on January 1, 1919, there were held by American investors and bankers $2200 million of foreign government obligations issued after the war began.

In addition to the foregoing government issues in the hands of American bankers and investors, Mr. Lamont estimated that there were held $500 million of foreign private obligations.[50]

[49] Balance of Trade of the United States, *ibid.*

[50] Journal of Commerce, January 2, 1919.

Annual Report of the Secretary of the Treasury for 1920. Exhibit 33, pp. 351-4, Estimate of Financial Obligations of Foreign Governments offered in the United States from August 1, 1914, to December 31, 1919, gives a total of $4,129.8 million including $950 million of Canadian Internal Loans, of which part was taken in the United States.

Loans (Other than Credits Established by the Government) Placed in the United States from Aug. 1, 1914, to Dec. 31, 1918, and Amounts Outstanding on Dec. 31, 1918, According to Prof. Bullock

(in million dollars)

Class	Orignal amount issued in United States	Amount outstanding in United States on Dec. 31, 1918
1. Government loans:		
Great Britain	700	652
France	450	450
Canada	175	175
Russia	85	85
Argentina	30	30
Germany	10	2
Newfoundland	5	5
Norway	5	5
Switzerland	5	5
China	5	5
Panama	3.5	2.9
Total	1473.5	1416.9
2. Municipal and provincial:		
Canada	104.6	103.8
France	86	86
Brazil and Chile	6	5.9
Total	196.6	195.7
3. Railroad loans:		
Canada	27.1	23.4
Argentina	15.0	15.0
Total	42.1	38.4
4. Industrial loans:		
Canada	11.2	10.7
5. Public utility loans:		
Canada	26.2	26.2
Australia	1.3	1.3
Total	27.5	27.5
Grand total	1750.9	1689.2

Of the loans issued at any previous time in the United States those outstanding on January 1, 1919, amounted to about $2200 million, not including subscriptions to foreign internal loans except

the French Government Internal 5's due in 1931 and the Russian Government 5½'s due in 1926.

FOREIGN GOVERNMENT OBLIGATIONS ISSUED AND OUTSTANDING HELD BY PRIVATE INTERESTS ON JAN. 1, 1919, ACCORDING TO MR. LAMONT
(in million dollars)

Country	Total issued	Amount repaid
Great Britain	1308	456
France	845	235
Russia	160	35
Italy	29	25
Germany	45	20
Switzerland	15	10
Greece	7	
Sweden	5	
Norway	8	3
China	5	
Canada	371	59
Argentina	147	73
Chile	6	
Bolivia	3	
Panama	3	
Uruguay	3	
Yucatan	10	
Brazil	5	
Miscellaneous	130	
Total	3105	916

FOREIGN LOANS IN THE UNITED STATES OUTSTANDING JAN. 1, 1919 [51]
(in million dollars)

Country	Amount	Country	Amount
Great Britain	723.4	Brazil	5.5
France	535.5	Norway	5.0
Canada and Newfoundland	462.7	Switzerland	5.0
Mexico	128.6	Bolivia	4.5
Japan	107.8	Panama	2.9
Russia	85.0	Germany	2.0
Argentina	47.7	Peru	1.0
Santo Domingo	12.9	Australia	1.2
Cuba	10.0	Chile	0.4
		Denmark	0.2
		Total	2163.8

[51] Statement of the Guaranty Trust Co. Also reprinted in the Federal Reserve Bulletin, January, 1919.

This amount does not include cash advances and other charges against credits established by the United States, but does include loans placed in the American investment market at any time by foreign governments, states and municipalities, and private corporations, railroads, public utilities and industrial corporations. A similar table as of July 1, 1920, gives a total of $2222 million.[52]

2. LOANS FLOATED AFTER THE ARMISTICE—After the signing of the armistice the belligerents of Europe floated huge loans in the New York market. After the release of the "peg" in March, 1919, when the exchange rates of the countries of Europe declined below parity in the New York market, the neutrals too called upon the American investor for funds. On December 31, 1920, there were listed on the New York Stock Exchange the bonds of the United Kingdom, the French Government, the Kingdom of Italy, Kingdom of Belgium, the Government of Switzerland and five issues of the Dominion of Canada. In addition the securities of several European cities were listed—the bonds of Paris, Bordeaux, Lyons, and Marseilles, of Berne, Zurich, Copenhagen, Christiania, and Tokio. The bonds of the kingdoms of Denmark and Norway were listed on the curb and subsequently transferred to the Stock Exchange.

The total loans floated in the United States between the date of the armistice and January 1, 1921, were $783.3 million. Several of the loans included in this amount were renewals of loans previously placed.[53]

3. INVESTMENT TRUSTS—The proposal for an investment trust was put forth a month after the armistice was signed.[54]

The idea was well received in commercial and financial circles, and subsequently many tentative proposals were made.

(a) *European investment trusts*—The investment trust is an established financial institution in Europe. The rate of interest on

[52] Also reprinted in Federal Reserve Bulletin, July, 1920.

[53] Journal of Commerce, January 3, 1921. This paper printed the totals as well as the individual issues on the first day of the month during 1920 and part of 1919.

[54] Address of Paul M. Warburg at the Emergency and Reconstruction Congress of the War Service Committees of American Industries, December, 1918, at Atlantic City. Subsequently printed in the Annals of the Academy of Political and Social Science and in The Nation's Business during 1919.

the bonds of the home governments was less than the rate on foreign obligations. The accumulation of savings in Europe sought profitable investments and as a result investment trusts were developed. These trusts originated in Scotland in 1860, and grew in number thereafter. The underlying principle is the diversification of risk, which is made possible by pooling many small funds of savings. Under the guardianship of experienced financiers these are invested in ventures abroad. The British Investment Trust, Ltd., the Metropolitan Trust, Ltd., the Second Edinburgh Investment Trust, Ltd., and the Investment Trust Corporation, Ltd., owned from 200 to 315 separate issues, including bonds of foreign governments, municipalities and the securities of railroads, public utilities and banking, manufacturing and trading corporations. The diversification of investments affords stability. The British investment trusts have specialized in particular enterprises such as rubber and tea plantations or mining. These institutions built up British interests abroad and aided in the development of foreign countries, such as the United States, Argentina, Canada and Australia. The continental trusts specialize in their investments. Typical of this specialization are the Trust for Electrical Enterprises in Berlin, the Trust for Rubber Securities in Antwerp, and the Trust for Metal Securities in Basle. These trusts buy both stable investment securities and speculative securities. Again, at times they buy for the purpose of securing control. Before the war the yield was fairly high, 8 or 10 per cent, and the expense of operation was from 0.2 to 0.5 per cent of the investment. A list of the European trusts may be found in the year books of the various stock exchanges, such as the Stock Exchange Year Book of London, Saaling's *Boersenhandbuch* of Berlin, Van Oss' *Effectenhandboek* of Amsterdam, the *Annuaire Desfossés* of Paris, and the *Recueil Financier* of Brussels.[55]

(b) *American investment trusts*—Among the financial institutions of the United States the analogue of the investment trust is the holding company. Many of the public utility corporations in reality are investment trusts specializing in public utilities.

The American International Corporation, formed in 1916, is somewhat similar to the investment trusts of Europe. According to its official statement the business transacted by it includes par-

[55] For further discussion see Federal Reserve Bulletin, November, 1920, for article by T. H. Thiesing of the Inter-American High Commission.

ticipation in foreign corporations or in domestic corporations doing a foreign business. Such participation is achieved through the investment in corporate securities. Some securities are held for income, others are sold from time to time. The American International Corporation operates much like a holding company, which buys part or all of the securities of another company for purposes of control.

Another American institution similar to the investment trust is the Foreign Bond and Share Corporation, which was formed in May, 1919. Its purpose, as stated in its prospectus, is to finance public and private enterprises in Central and South America, the Far East, Europe, and other parts of the world and to sell the debentures of the corporation based upon them. Its directorate consists of representatives of prominent financial institutions, in several parts of the country.

4. The War Finance Corporation—The investment trusts in the United States and the Edge law corporations, to be discussed below, were not formed for the purpose of correcting foreign exchange rates. Their prime purpose, to mobilize the investment funds of the United States and to extend credit to foreign countries, would have the effect of correcting exchange rates. For borrowing by a country creates credits in its favor just as exports would, and lending by a country creates debits just as imports would.

The need for materials by the countries of Europe, whose currencies were depreciated, was met temporarily and in small part by the War Finance Corporation. This institution was organized in the Treasury Department with a capital of $500 million, all owned and paid for by the United States Treasury. Its power to aid exports was granted under the Victory Note Act passed on March 3, 1919. It was not very active because during the period of its functioning, the United States government itself made advances to the countries of Europe partly out of the original $10,000 million fund, gave credits authorized by the Victory Note Act for the sale of surplus army supplies left in Europe, extended credits for the sale of wheat, the price of which was guaranteed, and advanced monies for relief. As these credits expired, applications for loans were received by the War Finance Corporation. Up to May 10, 1920, when, under orders from

the Secretary of the Treasury, it ceased making loans, the commitments entered into amounted to about $50 million, of which about $30 million was advanced in cash. About $100 million of applications were pending at the time of the suspension of activity. In theory the War Finance Corporation operated like the European investment trusts. It took the obligations of the American exporter backed by the paper of the European importer, endorsed by his bank and guaranteed by his government. On the other hand the corporation expected to obtain additional funds through the sale of its own debentures, the first series of which amounting to $200 million, were issued in 1919 (though not under the amendment authorizing the promotion of exports).

5. EDGE LAW CORPORATIONS—The War Finance Corporation was considered as an expedient for the transition period only. The law provided for the cessation of its activity one year after the proclamation of peace. However, the function of the War Finance Corporation was to be exercised in the post-war period by private initiative, under S.2742, the so-called Edge Law, which authorized banking corporations to do a foreign banking business.

a. *The law*—The Edge Law, approved December 24, 1919, is an amendment to the Federal Reserve Act. It authorized corporations to be organized for the purpose of engaging in international financial operations, either directly in a dependency or insular possession of the United States or through the agency or control of local institutions in foreign countries. Such corporations are put under the control of the Federal Reserve Board. In addition to a wide variety of banking powers such as the power to purchase, sell, discount and negotiate with or without endorsement, notes, drafts, checks, bills of exchange, acceptances and evidences of indebtedness, and to purchase and sell securities, Edge-law corporations may issue debentures, bonds and promissory notes, but not exceeding 10 times their capital stock and surplus. Furthermore, such corporations have the power, with the consent of the Federal Reserve Board, to purchase and hold stock or other certificates of ownership in any other corporation not transacting any business in the United States, except such as may be incidental to its international foreign business.

b. *Companies formed*—The First Federal Foreign Banking Corporation, of New York, was organized under the Edge Law,

shortly after its passage. The sharp decline in the exchanges in 1919 and in 1920 delayed the formation of other similar corporations. Furthermore the suspension of the War Finance Corporation in the spring of 1920 caused the abandonment of plans for the organization of similar additional companies, for these expected to obtain loans from the War Finance Corporation if conditions in the investment market should make it difficult for them to obtain funds from the public. The sharp decline in prices toward the end of 1920 created a strong demand throughout the country that the bankers give some relief. In response to this pressure the American Bankers' Association projected the Foreign Trade Financing Corporation with a capital of $100 million. The cotton planters, who were very severely affected by the decline in prices, likewise organized on December 29, 1920, the Federal International Banking Corporation with a capital of $7 million. The former company never was organized. The latter was not called to active functioning owing to the sharp rise in cotton prices in the fall of 1921.

The deranged condition of the exchanges prevented further large exports from the United States. The damming back of the flow of goods accelerated the world-wide drop in prices. The immediate purpose of financial institutions along the lines of the European investment trust or the Edge Law corporations was to advance credit to Europe, to correct the declining exchanges, and to sustain the normal currents of trade.

vi. *The Control of the Movement of Capital*

(a) *Control of the Movement of Capital in the United States*—

During the war legislation was enacted whose prime purpose was to check the financial operations of enemy aliens. Subdivision b, section V, of the "Trading with the Enemy Act" as amended gave the President power to investigate, regulate, and prohibit by means of licenses or otherwise any transactions in foreign exchange and the exportation, hoarding, melting or earmarking of gold, silver, coin, or bullion or currency, transfers of credit of any form (other than credits relating to transactions wholly within the United States), and transfers of evidences of indebtedness or of the ownership of property between the United States and any foreign countries, whether enemy or ally of enemy, or between residents

of one or more foreign countries by any person within the United States.

To give effect to this legislation the Division of Foreign Exchange of the Federal Reserve Board classified dealers in foreign securities into three groups. Those in Class C were dealers who carried accounts or securities or who dealt in securities *for* foreign correspondents, but who did not carry accounts or securities *with* foreign correspondents, or deal *through* foreign correspondents. In other words Class C consisted of dealers who operated in the United States. Class B were dealers who carried accounts or securities *with* foreign correspondents or who dealt *through* such correspondents, but did not carry accounts or deal in securities *for* foreign correspondents. In other words, Class B were dealers in the United States who operated abroad. Class A consisted of dealers who dealt in securities *for* foreign correspondents or *through* foreign correspondents, and who carried accounts or securities *with* or *for* them. In other words, Class A consisted of dealers who operated in the United States for foreign account and who operated abroad through correspondents. Dealers were licensed and the Division of Foreign Exchange of the Federal Reserve Board always retained the right to restrict the operations of any licensee, with the object of preventing Germany from realizing on property or credit in neutral countries for the purpose of establishing credit or for the purchase of war materials.[56]

(b) *Control of the Movement of Capital by Foreign Countries*—
Other countries likewise regulated operations in foreign exchange, not only for the purpose of preventing the enemy from realizing on property held abroad, but also for the purpose of stabilizing exchange. Most of the belligerents forbade the exportation of currency or securities, the countries including Great Britain, France, Belgium, Roumania, Greece, Portugal, and Brazil. A good many countries prohibited speculation in exchange and restricted purchases and sales of foreign drafts to bona fide trade operations. Among such countries were Italy, Belgium, Greece, Czecho-Slovakia and Jugoslavia. Czecho-Slovakia went so far as to require the payments for its exports to be made in foreign

[56] Executive Order of the President, dated Jan. 26, 1918, and Instructions to Dealers, issued by the Federal Reserve Board, Division of Foreign Exchange.

currency. The licensing and control of dealers operating in foreign exchange was practised by Germany, Italy, Belgium, Roumania, Greece, Portugal and Czecho-Slovakia. Several countries centralized all dealings in foreign exchange in order to secure better control, among them being Germany, Austria, Bulgaria, France, Italy, Roumania, Greece, Czecho-Slovakia, Jugoslavia, Finland, and Spain.

F. Stabilization of the Allied Exchanges in New York

i. *Mechanism of the "Peg"*

The United States government was not officially concerned in the mechanism of the stabilization of the Allied exchanges in New York. Government advances to the Allies were made for the purpose of supplying them with war materials. Of course these advances helped Great Britain in continuing to "peg" the exchanges. The "pegging" operation was undertaken by Great Britain as soon as sterling began to depreciate, and it was continued until April, 1919. The United States government advances began on April 24, 1917, and continued until March 10, 1920.

(a) *United States Government Advances to the Allies*—

1. The law [57]—By the Acts of Congress of April 24, 1917, and September 24, 1917, known as the First and Second Liberty Bond Acts, and by the amendments thereto, the Secretary of the Treasury, with the approval of the President, was authorized to establish credits in favor of the Allies, and to the extent of the credits to purchase at par from the Allies their several obligations. The Secretary was guiued by the necessities of the Allies for supplies and materials. According to the law the authority granted to the Secretary to establish credits to foreign governments was to cease upon the termination of the war, but the Secretary fixed March 10, 1920, as the date of cessation.

[57] Sections 2 and 3 of the Second Liberty Bond Act.

2. THE AMOUNTS—The total amount authorized was $10,000 million, as follows:[58]

	Million dollars
First Liberty Bond Act, April 24, 1917	3,000
Second Liberty Bond Act, Sept. 24, 1917	4,000
Third Liberty Bond Act, April 4, 1918	1,500
Fourth Liberty Bond Act, July 9, 1918	1,500
Total	10,000

On March 10, 1920, the Secretary discontinued the establishing of any new credits in favor of the Allies and limited the cash advances under established credits to the actual needs in connection with contracts for war materials. From April 24, 1917, up to November 15, 1920, the credits established, after deducting credits which had been withdrawn, amounted to $9711 million, distributed as follows:

Countries	Net credits established in million dollars
Great Britain	4277
France	3048
Italy	1666
Belgium	349
Russia	188
Czecho-Slovakia	68
Greece	48
Servia	26
Roumania	25
Cuba	10
Liberia	5
Total	9711

The amounts established corresponded roughly with the amounts of exports from the United States to the several countries. In the case of France and Italy the advances from the United States Treasury at one time exceeded the amounts of exports. From April 24, 1917, to June 30, 1919, the total cash advances to the Allies amounted to $9092 million, and the total exports

[58] See the several Liberty Bond Acts, also Report of the Secretary of the Treasury, 1920, p. 53.

from the United States to the countries involved amounted to $8624 million.

Country	Advances from United States treasury (in million dollars)	Exports from the United States (in million dollars)
United Kingdom	4277	4654
France	2643	2144
Italy	1555	1079
Belgium	336	415
Russia	188	299
All others	93	33
Total	9092	8624

3. THE FORM OF THE DEBT—In settlement of these advances the Allied governments gave their obligations, which were short-term or demand certificates of indebtedness signed by duly authorized representatives of the several governments receiving the advances. These obligations were to be converted at par with an adjustment for accrued interest into an equal par amount of gold bonds of the governments concerned.

4. THE RATE OF INTEREST—The law originally placed the interest on the foreign obligations at 3 per cent per annum and increased it thereafter to 3¼ per cent, to 3½ per cent, to 4¼ per cent, and finally to 5 per cent to conform to the rising cost of funds to the United States government. Above a minimum the rate of interest chargeable to the foreign governments was not fixed under the terms of the act but was left to the discretion of the Secretary. Accordingly the Secretary charged the foreign governments ¼ per cent more than the rate paid by the United States government to compensate in part for the loss to the United States arising from the issue of tax-exempt bonds and for the cost of floating. The rate of interest borne by any obligation in payment of advances made by the United States government was not to be less than the highest rate borne by any bonds of the United States. The rate of interest of the long-term bonds into which the short-term obligations of the foreign governments might be converted was to be not less than the rate of the short-term obligations. The interest due up to May 15, 1919, except in the case

of Russia, was paid in cash. To the extent that such interest was not paid from other resources of the governments concerned, it was paid from the proceeds of further loans made by the United States. The interest accrued and unpaid for the three semi-annual periods ending October 15, 1920, and November 15, 1920, amounted to $693 million, distributed as follows:

INTEREST ACCRUED AND UNPAID [59]
(in million dollars)

Country	Amount
Great Britain	314.6
France	211.5
Italy	120.2
Belgium	25.3
Russia	14.1
Czecho-Slovakia	4.0
Servia	2.0
Roumania	1.6
Total	693.3

5. MATURITY OF THE PRINCIPAL—The maturity of the obligations of the foreign governments was fixed under Section 8 of the Victory Note Act. The obligations of foreign governments acquired by the Secretary of the Treasury were to mature at such dates as might be determined by the Secretary provided that such obligations acquired under the provisions of the First Liberty Bond Act or upon the conversion of short-time obligations acquired thereunder were to mature not later than June 15, 1947, and all other such obligations of foreign governments were to mature not later than October 15, 1938. The early certificates or obligations of the foreign governments were payable at fixed dates of maturity, all of which had passed, so that they were regarded as demand obligations.

However, the Secretary was authorized to receive payments on or before maturity of any obligations of foreign governments acquired by the United States and to sell any such obligations at not less than purchase price plus accrued interest, and to apply the proceeds to the redemption or purchase of any bonds of the

[59] Report of the Secretary of the Treasury, 1920, pp. 57-58.

United States. Up to November 15, 1920, about $115 million was repaid, distributed as follows:[60]

	Million dollars
Great Britain	80.2
France	31.4
Roumania	1.8
Servia	0.6
Cuba	0.5
Total	114.5

(b) *The Expenditures of the United States Army Abroad*—.

The purchases of European supplies by the United States for the army abroad helped indirectly in stabilizing the Allied exchanges. The currencies needed by the United States in France, Great Britain, and Italy for war expenditures in those countries were provided by the foreign governments. Under Section 4 of the Second Liberty Bond Act as amended, the Secretary of the Treasury was authorized to make arrangements during the war and for two years after its termination in or with foreign governments to stabilize the foreign exchanges and to obtain foreign currencies and credits in such countries. He was empowered to use any such credits or currencies for the purpose of stabilizing or rectifying the foreign exchanges. Equivalent amounts of dollars were made available to these foreign governments to meet their war expenditures in the United States. The total expenditures from January, 1918, up to November, 1920, when the account was practically closed, amounted to $1491 million, distributed as follows:

DOLLAR EQUIVALENTS PAID BY THE UNITED STATES FOR FOREIGN CURRENCIES

	Million dollars
Belgium	1.2
France	1025.4
Great Britain	449.5
Italy	14.4
Total	1490.5

By this arrangement the needs of the foreign governments for advances from the United States were reduced.[61]

[60] Report of the Secretary of the Treasury, 1920, p. 53.
[61] Reports of the Secretary of the Treasury for 1918, p. 36; 1919, pp. 66-67; 1920, p. 67.

(c) *Credits for the Purchase of Army Property and of Guaranteed Wheat*—

Additional credits were authorized under the Victory Note Act (Section 7) whereby until 18 months after the termination of the war the Secretary of the Treasury was empowered to establish credits for any of the Allied governments for the purpose of providing for the purchase of property owned but not needed by the United States and of any wheat the price of which had been guaranteed by the United States. The foreign government was to give in payment its obligation bearing interest at the rate of 5 per cent per annum and maturing not later than October 15, 1938. The foreign obligations received through the Secretary of War up to November 15, 1920, on account of the sales of surplus war supplies aggregated $563 million, distributed as follows:

	Million dollars
France	400.0
Poland	57.6
Belgium	27.6
Jugoslavia	25.0
Czecho-Slovakia	20.6
Roumania	12.9
Esthonia	12.2
Lithuania	4.2
Latvia	2.5
Russia	0.4
Total	563.0

Foreign obligations received through the American Relief Administration on account of relief rendered under the Act approved February 25, 1919, and held by the Treasury as custodian amounted to $84 million, distributed as follows:

	Million dollars
Poland	51.7
Finland	8.3
Roumania	8.0
Czecho-Slovakia	6.3
Russia	4.5
Latvia	2.6
Esthonia	1.8
Lithuania	0.8
Total	84.0

(d) *British Treasury Bills*—

The actual stabilization of exchange was accomplished through the purchase and sale of British treasury bills in the open market in New York. The details concerning British and French treasury bills have been given above. The amount of sterling exchange purchased for the account of Great Britain by J. P. Morgan & Company, her fiscal agents, in the period from the spring of 1915 until the spring of 1919 was almost £840 million. The Bank of France bought fr. 18,000 million of French exchange. This sum was provided partly from the resources of the Bank and partly from credits opened in London and New York in favor of the Bank and of the French Treasury.

(e) *Licensing of Dealers in Exchange*—

The licensing of dealers in foreign exchange during the belligerency of the United States made it possible to centralize and control the foreign exchange operations of all dealers in the United States. The total amount bought and sold was recorded and the reason for any particular transaction was a proper subject for inquiry and restriction by the Division of Foreign Exchange of the Federal Reserve Board. The control of exports and imports by the War Trade Board, the embargo on gold and the control of the foreign exchange operations by the Federal Reserve Board, all facilitated the "pegging" of the Allied exchanges in New York.

ii. *The Effects of the "Peg"*

The stabilization of the Allied exchanges interfered with the self-corrective effects of changes in the visible and invisible trade balance. The anomalous effects were noticeable not only on the stabilized currencies, sterling, francs and lire, but on the dollar and also on the neutral currencies. The stabilization of sterling in New York distorted exchange rates throughout the world.

(a) *The Effect on the Allied Powers*—

1. THE MAINTENANCE OF AN ARTIFICIAL LEVEL—In spite of a huge excess of imports the Allied exchanges remained fairly close to par. The excess of imports increased in unparalleled

fashion; in the case of the United Kingdom, from the equivalent of about $1157 million in 1913 to about $2917 million in 1917; in the case of France, from the equivalent of about $300 million in 1913 to $3000 million in 1917; and in the case of Italy, from about $219 million in 1919 to about $2000 million in 1917.[62] And yet during the period of the "peg" sterling fluctuated in the New York market about 2 per cent below par and francs from 5 to 12 per cent. In furtherance of the common military aim, it was necessary to preserve the credit of the Allied governments and to maintain their purchasing power in foreign markets. The support of the Allied exchanges tied them to the dollar. The fluctuations in the Allied exchanges resulted not from the factors both visible and invisible that determined the balance of trade of the individual countries but from the total Allied exports, imports, ocean freights, interest charges and other factors in the combined trade balance of all the Allies.

2. THE FAILURE OF THE SELF-CORRECTIVES—The maintenance of the Allied rates at an artificially high level prevented their self-correction. Because the rates did not fall to their natural level the imports of the Allies were not checked nor were the exports stimulated. The Allied powers gave us fewer pounds sterling, francs or lire for American exports than they would have if the exchanges had fallen to their natural level. Likewise the Allies received more dollars for their exports to the United States. Of course commercial considerations were set at naught, because military considerations were primary.

3. FINANCIAL WEAKNESS CONCEALED—The healthy effect of depreciation in reducing imports and in stimulating exports was not felt during the period of stabilization. But the prolongation of support by the strong countries concealed the unsoundness of the stabilized currencies. Therefore when the expedients for stabilization were abandoned, the shock was severe in both France and Italy. Had the "peg" been further continued the disarrangement would have been more painful. The stabilization of the exchanges created a fool's paradise for some of the nations of Europe. The release of the exchanges was an admonition to adjust themselves to realities.

[62] See the writer's International Commerce and Reconstruction, p. 62.

4. STRENGTHENING OF BRITISH PRESTIGE[62]—The records of the Division of Foreign Exchange of the Federal Reserve Board show the focal position of Great Britain in the international financial system. From February 20, 1918, to June 25, 1919, the period in which the foreign exchanges were under control in the United States, the total exchanges from all sources on all countries of the world purchased by American dealers was $11,770 million, while the total amount sold was $11,747 million. About 55 per cent represented dealings in sterling.

a. *Sales of sterling between United States dealers*—Of the $9980 million total purchases and sales of exchange *between dealers in the United States* during this period approximately 69 per cent was for exchange on Great Britain. During the period from February 20, 1918 to December 31, 1918, the corresponding figure was 72 per cent.

b. *Sales of sterling by foreign holders*—Sterling bills were sold in the United States by foreign holders from February 20, 1918, to June 25, 1919, to the extent of $928 million. Purchase of sterling by foreigners from American dealers amounted to $905 million. An excess of sterling bills of $23 million was offered on the New York market. The British banks operated as intermediaries for foreign accounts. Purchases by American dealers of sterling exchange from the neutral countries were greatly in excess of the sales of sterling exchange to them. For instance, during nine months of 1918 Spain sold to the United States $12,143,000 of sterling exchange and purchased $8,531,000 in sterling, a balance in Spain's favor of $3,612,000. The excess explains not only the slight depreciation of the Allied exchanges in New York but the heavy depreciation of the dollar and the currencies of the Allies on the neutral markets.

During the period of the gold embargo, which coincided largely with the period of control of the exchanges, sales of sterling in the United States covered current trade rather than accumulated balances. But prior to the enforcement of the embargo, sterling exchange was sold in New York for foreign account to a much larger extent.

c. *British operations in neutral currencies*—The important position of Great Britain in foreign exchange is borne out by the

[62] Annual Report of the Federal Reserve Board, 1918, p. 53, and 1919, p. 47.

large transactions in neutral currencies which were cleared through Great Britain en route to and from the United States. The United States bought $34,622,000 of neutral currencies from Great Britain but sold only $9,322,000 to Great Britain, leaving an excess of purchases of neutral currencies from Great Britain by the United States of $25,300,000 for the period February 20, 1918 to December 31, 1918.

TRANSACTIONS IN NEUTRAL CURRENCIES BETWEEN GREAT BRITAIN AND THE UNITED STATES

(in thousand dollars)

Currency	Purchases by United States from Great Britain	Sales by United States to Great Britain	Excess of Purchases by United States
Dutch guilders......	6,721	2947	3,774
Norwegian kroner...	4,392	1738	2,654
Swedish kroner......	5,379	1349	4,030
Spanish pesetas.....	13,324	914	12,410
Swiss francs........	4,806	2374	2,432
Total........	34,622	9322	25,300

The arbitrage transactions of American dealers during the entire period of control of exchange (February 20, 1918, to June 25, 1919) amounted to almost $3,000 million, most of which were handled through Great Britain.

Purchases from other countries through arbitrage by United States dealers........................	$1,606,710,000
Sales to other countries through arbitrage by United States dealers	1,296,454,000
Excess of purchases by United States dealers through arbitrage	310,256,000

This huge excess of purchases of arbitraged exchange explains both the depreciation of the dollar and of the Allied currencies on the neutral markets as well as the stabilization of the Allied exchanges in New York.

(b) *Effect on Neutrals*—

The one remarkable and outstanding effect of the stabilization of sterling in New York was the decline on the neutral markets of the exchanges of the Allied and Associated powers.

1. TRADE CURRENTS—In the trade with the European neutrals the United States had an excess of exports, as shown above, and therefore if the dollar had not been tied to the Allied currencies, it should have been at a premium on the neutral markets. On the other hand in the trade with the South American countries the United States had an excess of imports, particularly so toward the end of the war. In these countries therefore the dollar should have been at a slight discount.

The significant thing, however, is that the trade of several neutral countries with the rest of the world showed a greater increase of exports than of imports during the war. The following had an excess of exports over imports: Spain, Sweden, Argentina, Brazil, and Chile. The other neutrals, Norway, Denmark, Holland and Switzerland, had an excess of imports, which however was much smaller than the pre-war figure.

EXCESS OF EXPORTS BEFORE AND DURING THE WAR [64]
(−) excess of imports; (+) excess of exports
(in millions)

Country	1913	1917
Sweden	− 29 kroner	+418 kroner (1916)
Spain	−248 pesetas	+577 pesetas
Argentina	+ 23 pesos	+169 pesos
Brazil	− 35 milreis	+299 milreis
Chile	+ 67 pesos	+357 pesos

EXCESS OF IMPORTS BEFORE AND DURING THE WAR
(in millions)

Country	1913	1917
Denmark	−137 kroner	− 49 kroner
Netherlands	−835 guilders	−286 guilders
Switzerland	−543 francs	− 82 francs

On the other hand, corresponding to an increase in the balance of exports or to the decrease in the balance of imports of the neutrals, the imports of the several Allied powers greatly increased, as cited above. As a result, the Allied exchanges, tied together, and taken as a whole, depreciated in the neutral markets. For instance, during the calender year 1917 Spain had an excess of

[64] International Commerce and Reconstruction, pp. 317, *et seq.*

exports to England of about $82 million and of over $300 million in her trade with the three principal European belligerents.

The British excess of imports from Spain rose from the equivalent of about $28 million in 1913 to $130 million in 1918. The French excess of imports from Spain rose from the equivalent of about $25 million in 1913 to about $222 million in 1917. The combined value of the British and French excess of imports from Spain rose from the equivalent of $53 million in 1913 to the equivalent of $303 million in 1917. On the other hand the excess of exports from the United States to Spain rose from about $8 million in 1913 to about $43 million in 1918. The establishment of a stabilized pound and franc in New York tied the three countries into a trading unit, so far as their foreign exchanges were concerned. Great Britain, France and the United States, combined, had a net excess of imports from Spain equivalent to $45 million in 1913, $263 million in 1917, and $165 million in 1918.

SPAIN'S BALANCE OF TRADE WITH LEADING ALLIES [65]
(in million dollars)
(conversion at parity)

	1913	1916	1917	1918
British excess of imports from Spain	28.0	72.3	80.7	130.5
French excess of imports from Spain	25.2	134.0	222.0	78.0
Combined British and French excess	53.2	206.3	302.7	208.5
United States excess exports to Spain	8.2	25.0	40.1	42.6
Combined net excess of imports from Spain of United States, Great Britain and France	45.0	181.3	262.6	165.9

2. DIFFICULTIES IN ALLIED SETTLEMENTS FOR TRADE BALANCES—The principal means of settling for a debit balance is the shipment of goods. The Allies were unable to ship goods during the war to the neutral countries in payment of their purchases of military supplies. In many cases the Allies intentionally withheld settlement by exports for fear that the commodities shipped would ultimately reach Germany.

The second factor in settlement of trade balances, likewise, was not available. Gold was sent to New York, the main market

[65] From official annual returns of trade.

for Allied purchases of military supplies. The object was not only to pay for purchases, but also to maintain easy credit conditions and to facilitate loans. The Allies had not unlimited gold supplies and thus could not settle for all their excess of imports by means of gold. Furthermore, several of the neutrals refused gold in payment of merchandise debts. The Scandinavian countries, in which there was a great scarcity of goods, at first put an embargo on the importation of gold and later accepted it only at a discount of 8 per cent, because the increased quantity of gold coupled with the scarcity of commodities caused an unsettling rise in prices. Similarly Spain received gold at a discount of 6 per cent below its parity. These countries preferred to have settlement in merchandise rather than in specie.

Finally, the third means of settlement, securities, was not available. The neutral countries did not lend to the Allies to settle for their excess of imports, partly out of fear of Germany and partly because of the war-time restrictions on the issue and movement of securities.

3. ARBITRAGE IN ALLIED EXCHANGES—The dollar depreciated as a result of the arbitrage operations in the Allied exchanges. Before the war arbitrage eliminated differences in the quotation of any currency on two or more markets. Speculators transferred their credits from one financial center to another and would buy a currency in the cheap market and sell it in the dear market. These operations stabilized exchange before the war. The margin of profit was very close and the fluctuations in exchange were kept within very narrow bounds.

a. *Mode of operation*—During the war the differences were much wider and the profit correspondingly greater. Foreign exchange operators bought sterling, francs and lire in the neutral free markets and sold them in the "pegged" New York market. An importer of Madrid who bought goods in England and agreed to pay for them in London might remit directly by purchasing depreciated sterling in Madrid or else he might buy dollars in Madrid and sell these dollars in New York and buy sterling which he would forward to London in settlement of his purchase. The sales of dollars in New York depressed the dollar in terms of pesetas. Similarly a Spanish merchant who exported to England and was paid in sterling might sell depreciated sterling in Madrid or else sell sterling in New York, where it was "pegged," and

obtain dollars and sell dollars in Madrid. The fact that the exporter had the choice of operating either directly between London and Madrid or indirectly via New York made the dollar fall and the pound sterling rise.

b. *The defeat of the aim of stabilization*—As a result of arbitraging the dollar and the pound the neutrals were able to defeat the aim of the "peg," which was to maintain an artificial purchasing power for the Allied currencies. The neutrals who operated for a profit were accused by the Allied powers of unfriendly acts. However, close supervision by the Foreign Exchange Division of the Federal Reserve Board prevented the enemy powers from obtaining credits or depressing dollars by the sale of American or Allied securities through the agency of neutrals. The defeat of the aim of the "peg" was not the result of enemy activities, but purely the result of the operation of economic laws. The neutrals bought sterling in a market where it was in excess and sold it in a market in which an artificial demand was created for it.

c. *The effect of arbitrage*—The extent of the resulting depreciation of the dollar abroad, or of the premium of the neutral currencies in New York, was striking. In November, 1917, Swedish kroner were at a premium of about 70 per cent in New York and in April, 1918, Spanish pesetas were at a premium of about 54 per cent.

PREMIUMS ON NEUTRAL CURRENCIES IN NEW YORK[a] DURING THE PERIOD OF THE "PEG"

Currency of—	Highest Premium between April, 1917, and July 31, 1918		Highest Premium, July, 1918
	When reached	Per cent	Per cent
Sweden	Nov., 1917	69.78	33.58
Norway	Nov., 1917	44.59	17.91
Denmark	Nov., 1917	44.59	16.79
Holland	July, 1918	29.35	29.35
Switzerland	May, 1918	35.28	31.50
Spain	April, 1918	54.15	42.75
India	Sept., 1917	22.30	10.14
Japan	July, 1918	7.82	7.82
Argentina	June, 1918	78.24	75.48
Peru	July, 1918	20.83	20.83
Bolivia	Dec., 1917	10.25	8.84

[a] Annual report of the Secretary of the Treasury, 1918, p. 38.

4. Heavy flow of gold to neutrals—Dealers remitted sterling exchange to New York from all parts of the world to make a profit. Although Great Britain restricted the exports of gold, the neutrals were able to evade this restriction by getting gold for their sterling in New York. As a result, there was a very heavy outflow of gold during July, August, and September, 1917, to the countries where the dollar was artifically depreciated. This movement was in conformity with economic law but defeated the Allied aim. To sustain her exchange rate in New York, Great Britain had to borrow money there and it was to her interest that gold should remain in the United States and thus maintain an easy market. On the other hand officials of the Treasury and of the Federal Reserve Board realized that the gold holdings of the United States were being depleted to settle for the excess of imports of the Allies.[67]

c. *The Effect on the United States*—

1. Depreciation of dollars—The New York rate reflected the effects of the "peg" on the Allied and neutral currencies described above. They are summarized briefly here. The Allied exchanges were supported at an artificially high level in New York, the neutrals bought the depreciated pounds, francs and lire in their own markets and sold them in New York. Great Britain was the pivot of arbitrage operations in New York. American dealers obtained neutral currencies through Great Britain and the neutrals sold much sterling in New York.

2. America paymaster for the Allies—New York settled for all the Allies. The world's balances of sterling, francs and lire were transferred to New York. Restrictions by the Allied powers on the exports of gold narrowed the market for settlement of gold balances to New York. As a result, as described above, there were very heavy gold exports from the United States, the excess of which over imports amounted to about $100 million,

[67] A full discussion of the effects of the "peg" on neutral exchange is found in hearings before the Committee on Banking and Currency of the United States Senate, 65th Congress, 2d Session; on S. 3928, "A Bill to Amend the Federal Reserve Act and Create a Federal Reserve Foreign Bank." (Washington: Government Printing Office, 1918.)

during July, August, and September, 1917.[68] The distribution of exports by countries was as follows:

GOLD EXPORTS FROM THE UNITED STATES IN 1917

(in million dollars)

Country	July	August	September
Spain	20	15	10
South America	7	4	1
Japan	37	20	13
India	3	3	3

3. GOLD EMBARGO—This gold movement was contrary to the individual interests of Great Britain, the United States, and of the other Allies, for some of the gold exported might ultimately reach the enemy powers. To check the outflow an embargo was declared by the President on September 7, 1917, and further exports were licensed and put under the regulation of the Federal Reserve Board.

4. COMMERCIAL EFFECTS OF THE "PEG"—As a result of the "peg" the American merchant received fewer pounds sterling for his goods or less of British goods in exchange than he would otherwise have received. However, in American currency, the exporter selling goods abroad received the same number of dollars for his merchandise regardless of where it was sold. The price was determined internationally and was the same for all purchasers, whether in countries with appreciated or depreciated currencies. However, purchasers whose currency was "pegged" were able to buy more American goods than if it were not "pegged." This was desirable as a war policy. The Allies had to have munitions of war. But it was not desirable that the Allies should be able to buy non-military supplies in the American market at an advantageous rate. However, the War Trade Board restricted the export of non-essentials and this advantage to the foreigner was eliminated. By lowering prices in terms of "pegged" currency, the "peg" tended

[68] Annual Report of the Secretary of the Treasury, 1917, p. 26.
Annual Report of the Federal Reserve Board for 1917, p. 20.

to increase the demand for American goods, and thus raised prices in the United States.

The American importer paid more dollars for goods from Great Britain than if sterling had not been "pegged." For the same reason, he paid more in dollars, or in dearer guilder for Dutch goods. So far as the imports were essential, the prices of Allied and neutral goods were raised to the American consumer by reason of the "peg" of the pound sterling, and the Allied supply houses received money of a larger purchasing power than their own. The same applies to the neutrals.

iii. *Correctives of the Depreciation of the Dollar on Neutral Markets*

a. *Proposed correctives*—The depreciation was undoubtedly disturbing to the commercial interests in the United States. Disregarding the vital fact that military considerations were primary, a few merchants with the aid of a senator proposed several infeasible measures to correct the depreciation of the dollar in the neutral markets.[69]

1. THE PROHIBITION OF ARBITRAGE—To correct the depreciation of the dollar, it was proposed that the sale by neutrals of the pound sterling for dollars be prohibited and that the merchants of neutral countries be compelled to buy dollars with their native currency. In view of the fact that the United States had an excess of exports in its trade with most neutral countries the prohibition of arbitrage would have changed the discount on the dollar to a premium in these neutral countries.[70]

The proposal would have proven unworkable, as W. P. G. Harding, Governor of the Federal Reserve Board, indicated in his testimony.[71]

[69] The prime mover behind this propaganda was an American importer who was short of neutral exchange on a rising market.

[70] This proposal was sponsored by Senator Robert L. Owen, Chairman of the Committee on Banking and Currency in the 65th Congress and solely as a war measure by some business men, notably Mr. Leopold Frederick, Treasurer of the American Smelting & Refining Co. It was quoted with approval in an editorial in the New York Times, June 30, 1918.

[71] Hearings on S.3928, 65th Congress, 2d Session, Government Printing Office, Washington, 1918, p. 353.

He pointed out that the United States could not apply this remedy because of the lack of control of exchange dealings in foreign countries. The United States could prevent a Spanish exporter from selling sterling in New York, but it could not prevent his London agent from selling pesetas for sterling and then selling sterling in New York. The proposal would have lessened the use of the dollar as a medium of exchange and increased the exchange transactions in London.

The proposal to prohibit arbitrage was similar to an alternative plan to compel American exporters to sell their goods in the currency of the neutral country. In view of the fact that the United States' exports to neutrals exceeded the United States' imports from neutrals, there would have been an abundance of neutral exchange in New York. The amount might have been adequate to furnish dollars to settle for American imports, but not to settle for the combined Allied excess of imports from the neutral countries, which was the basis of the inter-Allied financial unity. Both these proposals might have controlled the depreciation of the dollar but the harm resulting would have been far greater than the good accomplished and the prohibition would have been detrimental to our foreign financial position after the restoration of peace. It was fortunate that the United States did not have to resort to either of the proposed remedies.[72]

2. THE TAX ON EXPORTS TO NEUTRALS—Another proposal was to place a tax on all goods exported to the neutral countries, the rate being equivalent to the premium on the neutral currency or the discount on the dollar. This proposal was economically unsound, diplomatically impracticable, and politically impossible. Export taxes are prohibited under the Constitution.

3. A FEDERAL RESERVE FOREIGN BANK—Another remedy proposed was the establishment of a Federal Reserve foreign bank, whose powers should be identical with those allowed to the Federal Reserve Bank, under Sec. 14, a, b, c, and d of the Federal Reserve Act, including the power to deal in gold and silver, coin and bullion, to buy and sell bonds and notes of the United States and foreign governments with maturity not exceeding six months

[72] Annual report of the Federal Reserve Board for 1918, p. 55.

from the date of purchase, to buy and sell bills of exchange, and to establish rates of discount.[73]

The proposal met with strenuous opposition on the part of leading bankers and students of finance. They pointed out that the bank would serve no purpose which could not be accomplished by the existing organization and that it would embarrass negotiations with foreign treasuries then under way. The stabilization of foreign exchange by the British government was effected not through new mechanism, but through the application of accepted methods, namely the shipment of gold, loans, and the resale of securities in the market where the pound sterling was depreciated.

The attempt to stabilize exchange by any other methods is artificial. Exchange rates are indicators of economic conditions. Differences of exchange rates reflect the trade balances both visible and invisible, as well as the condition of the credit of the country and the effect of various methods of war finance.[74] It is idle to try to equalize exchanges unless it is possible to control the differences in the credit of the nations, their gold reserves and their methods of finance.[74]

b. *Fundamental difficulty*—The prime aim during the war was to win the victory. In the pursuit of this aim the United States government permitted the "pegging" of the Allied exchanges in New York. American commercial interests in the neutral countries were somewhat unsettled in consequence of tying the dollar to the depreciated Allied currencies. The United States alone could not settle for the excess of imports of all the Allies.

1. IMPOSSIBILITY OF TRADE SETTLEMENT—The commercial policy of all the belligerents was determined by military considerations. The aims of the war trade policy of the United States were (a) the conservation of domestic supplies for the use of the United States and of the Allied nations (b) prevention of trade directly or indirectly by persons in the United States with, for the benefit of, or in behalf of the enemy or its agents (c) conservation of tonnage for the transportation of military necessities for the

[73] S:3928, 65th Congress, 2d Session, introduced by Senator Robert L. Owen of Oklahoma, Chairman of the Committee on Banking and Currency.

[74] A clear statement of the difficulties in leveling the international exchanges is contained in the annual report of the Secretary of the Treasury for 1919, p. 13. See also Finance in the War, address to National Foreign Trade Council, April 18, 1918, by Fred I. Kent, Director, Division of Foreign Exchange, Federal Reserve Board.

United States and the Allies.[75] The war trade policy was concerned less with keeping dollar exchange at par in the neutral countries (which were a minor factor even from the commercial point of view) than with maintaining an adequate supply of essential materials for the United States and the Allies. Only after the satisfaction of these requirements was any surplus to be made available for consumption in neutral countries.

2. UNAVAILABILITY OF SECURITIES—Another method of settling for an excess of Allied imports was by means of securities. To accomplish this aim it would have been necessary for the United States to contract loans in the neutral countries equal to the extent of the combined excess of the imports of the Allies. This obviously was impossible.

3. INSUFFICIENCY OF GOLD—Similarly the United States could not ship gold to settle for the Allied excess of imports. There was not enough gold in the United States to make such a settlement feasible. In short, the military policy made it impossible for the United States alone to utilize any of the accepted means of settling a trade balance or of righting a depreciated exchange. The movement of commodities was restricted by the War Trade Board in the interests of military policy. The United States could not borrow in the neutral countries or sell them securities in sufficient amount to balance the combined excess of imports of the Allies. Nor could it ship gold for this purpose.

c. *Correctives in effect*—The officials of the Treasury and of the War Trade Board of the United States realized the difficulties of the situation.[76]

> Subject to the limitation of tonnage and other war requirements, it was most important to pay our adverse foreign balances through the export of commodities otherwise nonessential, and this consideration was urged upon those departments of our Government having such matters in hand.

[75] Report of the War Trade Board, pp. 12-13, Washington, Government Printing Office, 1920.

[76] Annual Report of the Secretary of the Treasury, 1918, p. 38.

Testimony of Assistant Secretary R. C. Leffingwell before the Ways and Means Committee of the House on the amended Second Liberty Bond Act, September 12, 1918. Federal Reserve Bulletin, October, 1918, p. 942.

A brief summary of these operations is given in an address on the Federal Reserve System, at Princeton University, January 21, 1921, by Albert Strauss, sometime member of the War Trade Board, representing the Treasury, and Vice-governor of the Federal Reserve Board.

While the United States supported the exchange of France, Great Britain and Italy, exports were almost equally valuable from a purely exchange standpoint, whether made by the United States or by such countries. Those countries have been importing vastly more than they could export, so there was ample tonnage for any exports they were able to make. The need for tonnage for carrying war supplies from the United States was so great as to make it difficult to provide shipping space for exports from the United States to European neutrals that did not own shipping. The matter of exports to European neutrals contiguous to the central powers, whether or not they owned shipping, was controlled by considerations of blockade. The possibilities of exports to the other parts of the world were limited to the outward voyage of the tonnage required to bring back needed imports to this country.

Foreign loans and credits constitute a means of temporarily relieving the exchange situation and by postponement afford an opportunity to obtain relief by means of proper trade measures. The Treasury has urged upon the Governments of the Allies the necessity of their obtaining neutral currencies through loans or credits or the sale of the foreign securities which they held. The Treasury also itself effected arrangements for stabilizing exchange in a number of neutral countries.

The only effective remedies available were credits from the neutrals, borrowing not only by the United States, but by all the Allies. International coöperation was as necessary in correcting the exchanges as it was in "pegging" the exchanges.

1. Borrowings by the United States—

a. *The law*—Recognizing the need for correcting the exchanges by borrowing abroad Congress enacted legislation for this purpose. Section 16 of the Second Liberty Loan Act authorized the Secretary of the Treasury to issue bonds or certificates of indebtedness payable, principal and interest, in any foreign currency, and he was authorized to designate depositaries in foreign countries with which the proceeds might be deposited.

Section 4 of this Act, as amended, authorized the Secretary of the Treasury during the war and for two years after its termination to make arrangements in or with foreign countries to stabilize the foreign exchanges and to obtain currencies and credits in such countries for this purpose.

The War Finance Corporation Act also contained a clause inserted at the request of the Treasury Department, which authorized the Corporation to issue bonds payable in foreign money or payable at the option of the holders either in dollars or in foreign money, at a fixed rate of exchange.

b. *Loans negotiated*—

1. Neutrals of Europe—*x. Spain*—A group of Spanish bankers opened a credit about $48 million, in favor of the United States. Spain was assured of her necessary supplies of cotton and oil, the amount being fixed at such a figure as would cover the minimum Spanish requirements but would prevent "future" purchases by German agents. On the other hand the United States forces in Europe received immediate delivery of 200,000 woolen blankets, 20,000 tons of leather, 100,000 tons of chick peas, and other military necessities. Furthermore, American credit assisted the French government in securing additional credit in Spain.

The Bank of Barcelona, and the Bank Urquijo granted the loan on September 7, 1918, under the following conditions: The maximum amount of the credit was about 250 million pesetas to be drawn between October 1, 1918, and July 1, 1919, at a rate not exceeding 50 million pesetas monthly. The credit was in the form of bills of exchange drawn by American bankers against the Spanish banks in the syndicate. Payment was to be made at maturity either in pesetas or in gold coin or bullion at parity. If the Spanish banks should not accept payment in gold because the Bank of Spain refused to receive it at par, the bills would be extended for six months in order that settlement might be in peseta bills.

As a condition of the loan equivalent amounts of American bonds were to be deposited payable in pesetas or in gold and with the same maturity as the bills of exchange.[77]

As security for the credit between the banks the Treasury Department furnished certificates of indebtedness payable in pesetas. The total amount of private credits drawn and public obligations sold amounted to 155 million pesetas. As Spanish exchange declined, the Treasury Department reduced its obligations to 80 million pesetas by purchases in the exchange market at parity or less.[78] On February 28, 1920, the certificates of indebtedness were completely paid for at a substantial profit to the government because pesetas had declined below parity. This is the only foreign indebtedness incurred by the United States during the war.[79]

[77] London Economist, Sept. 28, 1918.
[78] Report of the Secretary of the Treasury, 1919, pp. 66–67.
[79] Annual Report of the Secretary of the Treasury, 1920, p. 67.

y. Switzerland—Arrangements were made whereby Switzerland placed at the disposal of the United States Treasury about 75 million Swiss francs in return for dollars at par, although dollar exchange was at a discount in Switzerland. The object was to permit the purchase in Switzerland of goods necessary for the American Expeditionary Force. Limitations were set as to the time and amount of advances, which were restricted to government purchases.

z. Scandinavian countries—Arrangements were also made with Norway and Sweden. They did not open a credit in favor of the United States Treasury, but they did permit the proceeds of exports from the United States to Norway and Sweden to be deposited in dollars at par in the national banks of Norway and Sweden for the use of the Federal Reserve Bank of New York. The War Trade Board, on the other hand, granted export licenses on shipments consigned to Norway and Sweden only on the condition that the proceeds would be so deposited. The effect was to give the United States currency purchasing power at parity and thus lessen the premium on kroner in New York or the discount on dollars in Norway and Sweden. The stimulus on exports in the United States and the check on exports from Norway and Sweden were thus removed.

2. Neutrals of South America—The depreciation of the dollar in South America was due not only to the "pegging" of exchange and to the combined excess of imports of the Allies from the South American countries, but more directly to the excess of imports by the United States alone. In 1917 the excess of imports of the United States from Argentina was $70 million. In 1918 it was $122 million. The excess of imports of the United States from Chile in 1917 was $86 million and in 1918 $100 million. The total trade of these countries showed a large favorable balance. Argentina had an excess of exports equivalent to $20 million in 1916, and $164 million in 1917. Chile had an excess of exports in the same years equivalent to $106 and $130 million, respectively.[80] As a result of both the American and Allied excess of imports from these countries, dollars depreciated in South America.

x. Argentina—In January, 1918, an arrangement with the Argentine government was effected whereby the exchange between the two countries was stabilized. Under the arrangement American importers owing money to Argentine merchants paid it to the

[80] International Commerce and Reconstruction, pp. 332–334.

Argentine Ambassador in the United States, who deposited the amount with the Federal Reserve Bank in New York. The Argentine government on its part agreed that the accumulated balance on this account need not be shipped in gold until the Treaty of Peace had been ratified and on its part the American government agreed to interpose no obstacle to the necessary gold exports. The amounts deposited with the Federal Reserve Bank included an additional 3 per cent to cover the cost of anticipated future gold shipments. The original amount of the credit was $40 million.[81] In March, 1918, this credit was exhausted and subsequently increased to $100 million.[82]

y. Other South American Countries—An arrangement similar to that with Argentina but limited to $5 million with an agreement to extend it to a total of $20 million, was concluded with Bolivia. A credit of $15 million was opened with Peru, in order to avoid the shipment of gold from the United States during the period of the embargo. The arrangement called for a premium of 3 per cent, to cover the future charges for shipping of gold. Exchange on Peru was obtainable by American importers by making a deposit of dollars with the Federal Reserve Bank of New York to the credit of the Junta de Vigilancia de la Emision de Cheques Circulares of Peru. Upon receipt of such deposit, commission, cable charges, and guaranty, the Federal Reserve Bank cabled the Peruvian bank to pay the equivalent of the deposit in Peruvian funds to the party in Peru designated by the depositor. The rate was $5.01¼ for each Peruvian pound, or a premium to cover the cost of shipping gold of 3 per cent above the parity of $4.8665.[83]

Similar arrangements were effected with Uruguay, and negotiations with Chile were under way but were never completed.

3. Japan—Before the United States placed an embargo on gold exports, the settlement of the Allied excess of imports from Japan was effected by means of gold shipments from the United States. When the embargo went into effect Japanese holdings of Allied exchanges accumulated in New York. In September, 1918, the Japanese government issued exchequer bonds to the amount of 100 million yen, equivalent to $50 million, for the purpose of buying the

[81] United States Treasury announcement Jan. 8, 1918, reported in the press.

[82] Hon. R. C. Leffingwell's testimony, *ibid.*

[83] Federal Reserve Board announcement, Dec. 26, 1918.

foreign bills held by Japanese subjects.[84] The amount of dollar exchange kept on accumulating and in June, 1919, the Japanese government bought $130 million of United States treasury certificates of indebtedness with the funds obtained by the purchase of dollar exchange from its subjects. These treasury certificates did not constitute a special issue as in the case of Spain.

2. BORROWING BY THE ALLIES—a. *Spanish loans to France*—But borrowings by the United States could not settle for the combined excess of imports of the Allies. The problem was not American; it was international. This was made clear in the hearings on question of establishing a Federal Reserve foreign bank. Witnesses versed in finance tried to show the advocates of an exchange bank that the United States alone could not hope to solve the problem that the coöperation of all the Allies was required. The United States Treasury officials urged upon the Allies the importance of opening credits in the neutral countries in which their exchanges were depreciated. The credit negotiations between the United States and Spain were merely part of general negotiations of the Allies with Spain. A trade agreement between France and Spain provided for the movement of special commodities of which Spain had a surplus and the importation into Spain of commodities of which there was a shortage. On the other hand a group of Spanish bankers agreed to open a credit in favor of a group of French bankers for an amount not to exceed 350 million pesetas.[85] This credit remained unpaid in December, 1920.

England likewise borrowed extensively in Spain.

b. *Argentine loans to the Allies*—In January, 1918, Argentina opened a credit in favor of Great Britain and France to the extent of $200 million payable in two years. The credit was to cover the exportation of wheat, corn, oats, flaxseed, and beef. The large advances, running into billions, by the United States government undoubtedly influenced Argentina's position in the matter.[86] After the war Great Britain, France, and Italy applied to Argentina for

[84] Announcement of the Financial Commission in the United States of the Japanese Government, Sept. 22, 1918.

[85] For a discussion of the financial and commercial aspects see International Commerce and Reconstruction, pp. 78-80.

[86] Argentine correspondence of the London Economist during January, 1918.

a loan of 200 million pesos. Although the convention was signed the Argentine Senate refused to ratify it and after many changes the form of the loan was changed in a manner unacceptable to the borrowers.[87]

(d) *The Effects on Rates*—

The effect of borrowing by the United States and by the Allies was to lessen the premium on exchange. Undoubtedly the military events preceding the final collapse of Germany had a potent influence in accelerating the reduction of the premium of the Allied currencies in the neutral market.

The highest premium attained in July, 1918, and the premium on November 15, 1918, are given in the table below.

PREMIUM ON THE NEUTRAL EXCHANGES[88]

Currency of—	Highest premium, July, 1918 Per cent	Premium, Nov. 15, 1918. Per cent
Sweden	33.58	3.55
Norway	17.91	1.68
Denmark	16.79	0.75
Holland	29.35	3.86
Switzerland	31.50	3.21
Spain	42.75	3.63
India	10.14	10.14
Japan	7.82	9.33
Argentina	5.61	5.04
Chile	75.84	31.54
Peru	20.83	3.10
Bolivia	8.84	1.54

G. THE ABANDONMENT OF STABILIZATION EXPEDIENTS

i. Decontrol of Exchange

The release of the support of sterling exchange took place first in Spain in February, 1919. This step was followed by the abandonment of the support of francs by Great Britain in London, on March 18, 1919. The violent fluctuations indicated similarly an abandonment of sterling in New York. On March 20, 1919,

[87] Commerce Reports, April 19, 1919 and Argentine correspondence of the London Economist, Oct. 11, 1919.

[88] Annual Report of the Secretary of the Treasury for 1918, p. 38.

Mr. J. P. Morgan announced "we have received instructions from the British government to suspend purchases of sterling exchange for government account." On March 21, 1919, the support of lire in New York was modified and shortly thereafter abandoned. Mr. Fred I. Kent, Director of the Division of Foreign Exchange of the Federal Reserve Board, announced that "all restrictions as to the sale or purchase of lire exchange by dealers are hereby removed." The Italian Institute of Foreign Exchange, organized at the time when control of the quotation of the lira was undertaken, still continued to operate and for a few days there were two conflicting quotations in the market, an official quotation of the institute and a quotation of the free market.

The advances of the United States government were not officially part of the mechanism for stabilizing exchange and they continued for about a year. The Secretary of the Treasury announced that after March 10, 1920, no further credits would be opened by the United States government in favor of the Allies. Between March, 1919, and March, 1920, the United States government established new credits amounting to about $100 million.

ii Reasons for Release of the "Peg"

a. *Inability to Obtain Credit*—

The immediate reason for the release of the "peg" was the inability of the European nations to obtain further credit. The Bank of France ceased to sell sterling exchange at fixed prices because of the exhaustion of its credit in Great Britain. The British government withdrew the credits which it had advanced to the French government and which the French Treasury turned over to the Bank of France for the use of French importers.

After the armistice, the United States government advances were further extended only for the purpose of liquidating war contracts, and for the sale of wheat, the price of which was guaranteed by the government, and for purposes of relief.

b. *The Need for Return to Normal Conditions*—

Except for the support of lire exchange in New York by the United States, the stabilization of exchange was Britain's burden chiefly.

Great Britain advanced credits to the other Allies to support

their exchanges in London. Likewise it was Great Britain that raised loans and floated treasury bills in New York for the purpose of stabilizing sterling and indirectly the other Allied currencies. Furthermore, the control of the exchanges was interrelated with the control of exports and imports. Upon the release of the control of trade movements, it was more difficult if not impossible to continue to stablize the exchanges which were dependent upon them. Great Britain did not wish further to support the Allied exchanges in view of the large imports of luxuries and non-essentials. Continued support would have meant a cost-of-living subsidy to the continental Allies at the expense of the British Treasury. Again the large speculative operations became more difficult to control after the war, and upon the decontrol of exports and imports, speculation intensified the fluctuations of the exchanges.

One of the amusing aspects of the release of the "peg" was the conflict of reasons offered by the press. One explanation was that the release of the "peg" was due to a new commercial policy adopted by France, whereby depreciation of the franc would check imports into France and stimulate exports. A few days later the financial editor of the *Journal de Débats* stated, "If the British government will not grant France direct advances, France will be obliged to purchase elsewhere, in countries which are prepared to open credits in our favor." A year and nine months later, December 22, 1920, the French press chided the United States for failure to extend further credit, thus causing stagnation in Europe.

iii. The Effects of the Release of the "Peg"

As a result of the release of the "peg" exchange rates again became accurate financial indicators. They registered truly and for each country alone the effect of adverse trade balances, of the decline in the invisible credits, of the existence of large foreign debts, of the huge increases in paper currency, and of all the factors which operated to depreciate the Allied exchanges in New York. The presentation of a true picture of the unsound financial condition of Europe was the first step toward a restoration of normal conditions. Inequalities in exchange indicated not only the balances both visible and invisible between countries but also differences in their financial condition. The varying proportions of taxes to loans in financing the war, the resort to unsecured note issues of

the government or of the central bank of issue, the measures taken to balance the budget and to deflate the currency, all were reflected in the rate of exchange. Some months after the release of the "peg" interest rates were raised in Great Britain. Only the desire to make easy the transition from war to peace kept the Bank of France from raising its discount rate until April, 1920.

a. *The Sharp Decline of the Exchanges in New York*—

One of the early manifestations of the release of control was the disparity between rates for dollars in London and sterling in New York. During the period of control the difference was negligible. Furthermore, upon the announcement of the abandonment of the support of sterling by the British government the cable rate which had been maintained at 4.76\frac{7}{16}$ dropped to $4.70. Sight drafts fell to $4.67 and the following day to $4.60. For months after the release of the "peg" the newspaper headlines read daily, "Further Declines in Exchange," "Violent Breaks," "New Low Levels," "Lowest Level in the Century." The exchanges continued to decline throughout the year and into 1920.

Not only did the Allied exchanges, which had been supported,

HIGH MONTHLY DEMAND QUOTATIONS IN NEW YORK [89]
(Gold parity=100)

Currency	Feb., 1919	Dec., 1919	Oct., 1920
Belligerent			
Sterling	97.78	81.94	72.07
Francs	94.92	52.23	34.97
Lire	81.45	41.97	21.66
Neutral			
Swiss francs	106.74	94.20*	83.26
Guilders	102.61	95.15	77.26
Danish kroner	97.48	74.25	52.43
Swedish kroner	105.04	83.21	74.25
Pesetas	109.33	103.11	75.96
Argentine pesos	106.19	102.11	85.77
Chilian pesos	108.78	105.05	85.11

*November quotation. December quotation is out of line with the preceding and following months.

[89] Federal Reserve Bulletin, Nov. 1920, pp. 1159-1160.

decline greatly, but the neutral exchanges which had been at a premium during the period of control declined below par.

The same effects are shown in the high and low quotations for 1919. The high quotations were attained in the period prior to the release of the "peg."

CABLE RATES OF EXCHANGE [90]

Currency	Parity	High, 1919	Low, 1919	High, 1920	Low, 1920
Belligerent					
Sterling	$4.8665	$4.76 7/16	$3.665	$4.075	$3.1975
Francs	.1930	.1837	.0852	.0933	.0571
Lires	.1930	.1575	.0736	.0758	.0335
Neutral					
Swiss francs	.1930	.2092	.1718	.1836	.1508
Guilders	.4020	.42875	.36875	.3025	.2935
Danish kroner	.2680	.27125	.1735	.1920	.1[illegible]5
Swedish kroner	.2680	.2935	.2065	.2230	.1785
Norwegian kroner	.2680	.2825	.1950	.2055	.1[illegible]05

b. *The Effect on Trade—*

The fall of the exchanges checked European imports of non-essentials, for as the franc depreciated, the French importer had to pay an increasing price for the foreign goods. If the goods were dispensable the increasing premium checked imports, just as a domestic rise in prices checks purchases. However, some imports are indispensable; people must have food and raw materials for clothing and shelter. The effect of "unpegging" was to raise the prices of essential imports and thus increase the cost of living. The index numbers of wholesale prices in France rose from May onward continuously throughout 1919 and through a good part of 1920, simultaneously with the fall of the exchanges. The following table gives the monthly high demand rate for francs in New York in terms of gold parity as 100 and the French index number of wholesale prices, using the 1913 average as 100. Of course, rising import prices were not the sole factor in causing a rise in general prices. Both rising prices and falling exchange were due to increase in the note circulation.

[90] New York Times Annalist, Jan. 3, 1921.

THE DECLINE OF EXCHANGE RATES AND THE RISE OF WHOLESALE PRICES [91]

Month	Monthly high demand rates for francs in New York, Per cent of parity	French wholesale index numbers, 1913=100
1919		
January	94.97	348
February	94.92	340
March	94.82	337
April	88.13	332
May	85.34	325
June	82.64	329
July	79.79	349
August	70.98	347
September	66.27	360
October	62.14	382
November	58.60	405
December	52.23	423
1920		
January	48.08	487
February	38.76	522
March	39.17	555
April	35.91	584
May	41.19	550
June	43.47	493

The rise in the cost of living unsettled international trade and made the manufacture of imported raw materials a speculation in exchange.

The fall in exchange stimulated exports. These included both raw materials and manufactures. When the decline was particularly rapid, exports boomed and on a temporary improvement, exports declined. This fluctuation of prosperity and depression was particularly striking during the sensational decline and slight improvement in German exchange.

The resulting unsettled condition of business affectea not only the countries whose currencies were depreciated but also the non-European countries. After Europe had purchased the minimum quantity of indispensable goods necessary to restore her depleted stocks, the United States, Argentina, Brazil, Chile and Japan all suffered from the stagnation of industry after the middle of 1920 because of the diminishing excess of exports over imports. The

[91] Federal Reserve Bulletin, Aug. 1920, p. 842 and Nov. 1920, p. 1159. See also above, Figures XXI and XXII on pp. 340-1.

diminishing imports of the countries whose currencies were depreciated resulted in a decline of prices and a surplus of goods in the great sources of supply of raw materials. M. Loucheur, former Minister of Commerce, addressing the Chamber of Deputies, December 22, 1920, blamed America and England for the world-wide stagnation of industry. "Forty or fifty billion francs of additional credit in America and England would have stabilized the credit of the world. The hour has come to show them the error of their policy and the necessity of reopening government credits. Even if we are their prisoners they cannot abandon us."

(c) *The Effect on the Gold Market*—

Upon the release of the "peg" the currencies of the neutral countries declined in New York, and their demand for gold in New York in settlement of their excess holdings of the Allied exchanges ceased. Accordingly, on June 9, 1919, the Federal Reserve Board announced that control over the exportation of gold would be terminated. Because of a lack of an excess of exports to the United States, and a resulting lack of dollar drafts the neutral countries of Europe were unable to withdraw gold from the United States.

There was, however, a heavy flow of gold during the year 1919 to the countries of South America and the Far East, in the trade with which the United States had an excess of imports. The case of Argentina was typical. Upon the removal of the embargo on June 9, 1919, gold shipments began and continued heavily throughout the rest of the year. The excess of commodity imports from Argentina into the United States in 1919 was $43,000,000. However, during that part of the calendar year 1919 when gold was free to flow, the excess of gold exports from the United States to Argentina was $56,000,000. During the early months of 1920 heavy gold shipments continued.[92] During the fiscal year 1920,

[92] A curious factor in the exportation of gold to Argentina was the refusal of American bankers to renew the 50 million 6 per cent 5-year treasury notes, which matured May 15, 1920. The outflow of gold could have been checked by collecting this loan on maturity or else by borrowing in Argentina. The Argentine government would not let the American bankers settle for their excess of imports with the maturing treasury notes because of the difficulty of that government in re-financing internally. Strange to say British bankers undertook to refund the loan and obtained $50 million of gold in the American market which was shipped to Argentina on British account.

during most of which gold flowed freely, about $146 million of gold was sent to Argentina.

The depreciation of the dollar in Argentina soon corrected itself and the Argentine excess of exports to the United States began to decline in June, 1920, and by August there was an excess of imports from the United States. As a result the gold flow was reversed. In accordance with the credit agreement, mentioned above, the Federal Reserve Bank of New York had received gold and credited it to Argentina. The maximum amount was $72,500,000. Toward the end of May, 1920, the Argentine government released in New York $4,500,000 in favor of American exporters and continued to release gold in large quantities until July 10, 1920, when only $28,420,000 remained on credit to the Argentina government. Dollars rose to a premium in Argentina and on July 24, 1920, the Minister of Finance of Argentina ordered the Banco de la Nacion temporarily to cease accepting deposits of gold which called for equal withdrawals in the United States. As the embargo was declared pesos declined to a discount of 10 per cent. On October 11, 1920, the gold holdings in the United States to the credit of the Argentina government were exhausted and peso exchange declined further to a discount of 22½ per cent and on November 15, 1920, to a discount of 28 per cent.

Heavy gold shipments from all countries to the United States were resumed after the release of the "peg." [93]

(d) *The Continued Liquidation of Securities*—

Upon the release of the "peg" the flow of securities was again resumed. Again, the flow of securities acted as a corrective. The resale of the European holdings of American securities began again in large volume. Furthermore during this period American purchases of foreign internal securities, both government and industrials, ran to high levels. The decline of exchange also resulted in the accumulation of large balances of European exchange and currencies upon the part of American investors which they were ready to sell upon a rise and which thus tended to check any improvement in the exchanges. The European countries both Allied and neutral, whose currencies were depreciated in New York,

[93] Commerce Reports, Nov. 19, 1920, p. 787.

borrowed heavily in the New York market. As a result of the decline of the European exchanges after the release of the "peg" Europeans were less inclined to purchase American securities for purposes of evading their home income tax. The decontrol of the exchange had a sobering influence on the finances of Europe. The ways and means advances in Great Britain were subsequently brought under control and the notes of the Bank of France ceased to increase. They reached their maximum amount in 1920. The effect of the decline in exchanges, resulting from the release of the "peg," was to check further inflation and unsound methods of post-war finance.

CHAPTER X

BRITISH FOREIGN EXCHANGE

A. Causes of Depreciation

i. *The Nature of the Fluctuations*—The pound sterling rose on the exchanges of France and Italy. In the United States it declined, was stabilized during the War, and declined further after the release of the "peg." On both the Argentine and Japanese markets it depreciated after 1915. In the neutral countries, Switzerland, Holland, and Sweden, the pound sterling at first declined greatly but was supported somewhat as the result of the "peg" of sterling in New York; it rose after the release of the "peg" of francs and lire in London. On the exchanges in China and India the pound sterling declined, first on account of the increased excess of British imports and then owing to the violent rise in the price of silver.

Extent of the Decline of the Pound Sterling on the Important Exchanges [1]
(as of July each year)

Year	France demand rate, francs per £	Italy demand rate, lire per £	U. S. demand rate, dollars per £	Argentina demand rate, pence per peso,	Japan cables rate, per yen s. d.	Switzerland demand rate, francs per £	Holland demand rate, guilders per £	Sweden demand rate, kroner per £	China cable rate, per tael s. d.	India cable rate, per rupee. s. d.
1913	25.25	25.97	4.868	48.2	2 0.4	25.30	12.13	18.25	2 8	1 3.9
1914	25.15	25.265	4.876	47.7	2 0.4	25.20	12.12	18.26	2 6.2	1 4.0
1915	27.25	29.55	4.762	48.4	2 0.6	26.05	12.00	18.25	2 3.1	1 3.8
1916	28.145	30.40	4.757	48.9	2 2.1	15.27	11.50	16.40	2 11.4	1 4.1
1917	27.40	34.55	4.754	50.5	2 1.7	22.50	11.56	15.60	3 9.7	1 4.2
1918	27.17	43.50	4.753	51.7	2 2.3	18.95	9.39	13.45	4 8.2	1 6.0
1919	29.75	36.70	4.572	51.1	2 2.4	25.00	11.84	18.00	5 3.0	1 8.0

ii *Merchandise Balance of Trade*—

The basic cause of the depreciation of the pound sterling was a large excess of imports. In 1913 the excess of imports was

[1] Memorandum of Consul General Hollis, London, Commerce Reports, September 27, 1919.

£243 million, and in 1918 £822 million. The total imports, the exports of domestic produce, and the ratio of exports to imports for the years 1913 through 1918 are shown herewith:

TOTAL IMPORTS AND EXPORTS OF DOMESTIC PRODUCE [2]

(in million pounds sterling)

Calendar year	Total imports	Exports of domestic produce	Ratio exports to imports, Per cent
1913	768.7	525.2	68.3
1914	696.6	430.7	61.8
1915	851.0	384.9	45.2
1916	948.5	506.3	52.8
1917	1066.7	525.3	49.3
1918	1320.7	498.3	37.8

From 1913 to 1918 the ratio of exports to imports was almost cut in half and this fact explains the depreciation of sterling exchange.

If the reëxports of foreign and colonial produce be added to exports of domestic produce, the net excess of imports shows a still larger increase. In 1913 the net excess of imports was £133.9 million and for the year 1918 it was £789.9 million. The actual excess of imports and the relative figures, based on returns for 1913 as 100, are given herewith:

NET EXCESS OF IMPORTS [3]

Year	Excess of imports (in millions sterling)	Relative figures, 1913 = 100
1913	133.9	100
1914	170.4	128
1915	367.9	275
1916	344.6	257
1917	467.4	349
1918	783.8	585
1919	669.3	500
1920	378.8	283

[2] International Commerce and Reconstruction, p. 154.
[3] Official returns of the British Board of Trade.

The excess of imports rose in 1918 to a high level of almost six times the pre-war figure and the increase accounts directly for the depreciation of sterling.

iii. *The Decline of Invisible Credits*

The pre-war investments of Great Britain were estimated to be £4000 million and the annual income £200 million. Paish estimated that £1000 million of securities were liquidated, reducing the annual income by £50 million. Furthermore, Great Britain borrowed £1000 million abroad, which created an annual invisible debit of £70 million. The effect of the war, then was to reduce the pre-war income from investments from £200 million to £80 million. As an offset to her borrowings abroad, Great Britain loaned to her Allies £1739 million, the income from which ought to be about £90 million. However, Great Britain is the debtor of financially strong countries and is the creditor of financially weak ones and it is a question whether the net annual income from investments will rise much above £80 million for some time. In an approximation of the invisible balance after the war, the British Board of Trade increased the estimate of income from shipping from the pre-war figure of £130 million to £500 million as a tentative estimate and £440 million as a final estimate. Even if we disregard the increased income from shipping, the total British balance of trade, both visible and invisible, does not seem to warrant the depreciation of sterling that prevailed during 1920. The excess of imports from 1914 to 1918 amounted to about £2140.2 million and the loans to the Allies and Dominions amounted to another £1800 million or a total of about £3950 million. The borrowings abroad and the liquidation of securities as noted above amounted to about £2400 million. The difference, about £1550 million, represents the net excess of debits over credits.

The invisible credit balance was increased by borrowings from the United States, which at the time had the same effect as merchandise exports in creating a supply of bills on the United States. Conversely, the invisible credit balance was reduced by loans to the Continent which, at the time made, had the same effect as imports into the country. Both an importation of securities and an importation of merchandise create a world supply of bills on London and tend to depress sterling exchange.

iv. *Loans to the Allies*

(a) *During the War*—

Up to March 31, 1919, the loans to Dominions and Allies amounted to £1739.4 million, distributed as follows:

LOANS BY GREAT BRITAIN [4]
March 31, 1919
(in millions sterling)

Dominions	171.0
Russia	568.1
France	434.5
Italy	412.5
Belgium	86.8
Servia	18.6
Other Allies	47.9
Total	1739.4

These loans to the Allies were made to finance the purchase of war materials by them and thus to aid in the stabilization of their rates of exchange.

(b) *After the War*—

The loans to the Allies after the war included advances made to the debtor Allies for the purpose of postponing payment of interest, as well as new private loans floated in the London market.[5] There were various methods whereby Great Britain advanced loans to the Continent. In some cases the Continental buyer would deposit his native currency against the British shipment at the current exchange rate and would guarantee to deposit additional currency to compensate for the decline of his exchange. Again the British would supply raw materials in trust to Continental manufacturers and the property right would be guaranteed by the government. Upon the sale of the goods the British exporter would be reimbursed. Finally, the so-called refining trade was a barter of finished goods for raw materials. The British exporter would send raw materials to the Continent for finishing and retain a lien on the goods in process which would afford increasing security. Upon the completion of the finished merchandise the

[4] Budget speech of Mr. Chamberlain.
[5] London Economist, Sept. 6, 1919.

Continental importer would return to the British exporter a portion of the finished goods.[6]

Furthermore, loans were raised in Great Britain to pay for imports by the Continent from Great Britain. These loans, both long and short term, account for the rapid increase of exports of Great Britain and the decrease of the so-called unfavorable balance of trade. However, Great Britain sold on credit, but bought for cash and therefore was in possession of a large volume of non-liquid commercial bills which she could not use in settlement for her own imports. As a result, the pound sterling was tied to the Continental exchanges and fluctuated in sympathy with them, in much the same way as during the war the dollar was tied to the currency of the Allies and depreciated with them on the neutral markets of Europe. The loans by Great Britain to the Continent, however, covered not only sales on credit of goods and services but also loans to the Continent for other purposes and the purchase of Continental securities or industries.

(c) *Sterling Remained the World's Currency*—

The depreciation of sterling was due to the fact that imports into Europe from the United States were financed by remittances via London. Or in other words, Great Britain provided dollars, with which the Continent settled for its American imports. The tying of sterling and Continental exchanges resulted in the artificial depreciation of sterling and the artificial support of the Continent.

As a result the holdings of sterling in New York were very large but the holdings of the Continental currencies were relatively slight. Trading in exchanges, other than sterling, was effected via London. This situation followed from the efforts of Great Britain to increase her exports to the Continent and thus to restore the productivity of Europe.

(d) *The Palliative Character of Loans*—

These advances by Great Britain to the Continent did not permanently remedy the situation; they were palliatives. Like the

[6] British Trade Corporation's Methods in Jugoslavia, by Consul K. S. Patten, Belgrade, Servia, in Commerce Reports, Aug. 9, 1920. The Anglo-Danubian Association, Ltd., the New York Herald of April 20, 1920.

Anglo-Baltic and Mediterranean Bank, Ltd., Journal of Commerce, Apr. 16, 1920.

government advances during the war, these post-war loans concealed the true situation and in that respect were harmful. Upon the withdrawal of London's support, the other European exchanges fell sharply.[7] Assuming that the British Board of Trade figures for the invisible balance were correct and that the total debits and credits, both visible and invisible, would balance, London exchange should rise if England ceased to support the Continent. By the same token the Continental exchanges should fall if the temporary aid extended by London should be withdrawn.

v. *Inflation*

The increase of deposits and of the currency contributed to the depreciation of the pound sterling. If issued excessively, paper money which cannot be converted into gold at par depreciates abroad, just as at home. The increase of ways and means advances, the increase of public and private deposits of the Bank of England, and of private deposits of the joint-stock banks, created a redundancy of credit. When prices doubled, the value of the excess of imports of commodities doubled. On the other hand the invisible credits, such as income from investments either increased not at all, or certainly not in the same proportion as the price of commodities. As a result the commodity debits and invisible credits no longer balanced. A larger demand for bills resulted from the growing value of the excess of imports than could be paid for by the supply resulting from the stationary income from investments.

B. The Effects of Depreciation

The effects of depreciation have been discussed fully in the chapter on foreign exchange in the United States. To summarize briefly, the effects of depreciation were both commercial and financial. The depreciation of the pound sterling in New York and on the neutral markets increased the cost of British imports, particularly imports from those countries, in which exchange rates were not "pegged." The stabilization of exchange in New York

[7] See Par. 3. Final Report of the Cunliffe Committee, Dec. 3, 1919. The subject was discussed in the Chas Economic Bulletin for October, 1920, by B. M. Anderson, Jr.

kept the cost of British imports from rising. After the war the depreciation of the pound sterling in New York again increased the cost of imports from the United States and for a time increased the general cost of living. On the other hand the depreciation of sterling stimulated British exports.

The financial effect of depreciation was to induce selling of British holdings of foreign securities, in those countries in which sterling was depreciated. Furthermore, borrowing by Great Britain was stimulated, particularly in those countries where sterling was at a discount.

C. Correctives of Depreciated Exchange

The correctives of depreciation included the flow of merchandise, the movement of gold, the flow of capital and the improvement of fiscal and credit conditions in Great Britain. During the period of the "peg," loans were the chief means of correcting the depreciation of sterling. However, the "peg" was finally removed in March, 1919. The question of correcting the exchanges received the attention of the leading financiers in the City.[8] However, some futile proposals were made, such as the organization of an All-Empire Bank, much resembling the abandoned Federal Reserve Foreign Exchange Bank in the United States.[9]

i. *Merchandise Shipments*

During the war the trade correctives were absent. As a belligerent Great Britain was not in a position to check imports nor stimulate exports. After the war, however, the self-correctives again became operative. Imports decreased and exports increased. In the last normal year before the war, the excess of British imports was £133.9 million, in 1918 it was £783.8 million. The latter was the high annual record of the war. In 1919 the excess of imports was only £669.3 million and in 1920 it had declined to £378.8 million.

[8] Commerce Reports, Feb. 2, 1920, p. 541.
[9] Suggestion of F. C. Goodenough, Chairman of the Barclay's Bank.

Trade Balance of Great Britain [10]
(in millions sterling)

Year	Imports	Exports, including foreign and colonial produce	Excess of imports
1913	768.7	634.8	133.9
1918	1316.1	532.3	783.8
1919	1631.9	962.6	669.3
1920	1936.7	1557.9	378.8

The imports rose from 121.1 per cent of exports in 1913, to 247.2 per cent in 1918, and declined to 169.5 in 1919 and still further to 124.6 per cent in 1920.

The self-corrective effect was noticeable particularly in the latter half of 1920. In January, 1920, the ratio of imports to exports was 140 per cent. In February, it was 157 per cent, in March, 135 per cent, in May, 119 per cent, and for the rest of the year the average monthly figure was about the same as in May, although in November the ratio of imports to exports had declined to 109 per cent.

Although improvement was apparent in the trade figures, it was not reflected in the exchange rates, because the exports were going to the financially weak countries of Europe. For example, the value of the excess of British exports to France, Belgium, Italy, Germany and minor states was astonishingly large. The table is given herewith:

Excess of British Exports
(in millions sterling)

Country	1920 (9 months)	1919	1913
France	81.8	134.8	17.1*
Belgium	20.7	56.3	9.9*
Italy	21.3	18.8	6.5
Germany	14.8	22.2	27.5*

* Excess of British imports.

[10] Official returns of the British Board of Trade.

ii. *Gold Shipments*

The shipment of gold was an important corrective of the depreciation of sterling during the war.

(a) *Amounts*—

In 1914 the gold exports amounted to £30.6 million. In 1915 the amount was £39.2 million. In 1916 it was £38.4 million. Upon the entry of the United States into the war British exports of gold declined very greatly. Figures are unavailable, covering the period from April, 1917, through March, 1919, when the "peg" was released. From July to December, 1919, the exports of gold amounted to £14.6 million and during the year 1920, the amount was £92.6 million.[11] Most of the gold shipped before April, 1917, was consigned to the United States and lesser amounts to the neutrals of Europe. During 1919 and 1920 when the figures were again published, the exports were consigned to the United States, South American countries, British India and South Africa and the Straits Settlements.

The total United States imports of gold since the beginning of the war were largely from the British Empire, as is shown in the table following.

United States Imports of Gold [12]
(in million dollars)

Fiscal Year	Total	From United Kingdom	From Canada
1914	66.5	2.6	38.3
1915	171.6	2.0	110.8
1916	494.0	118.0	267.5
1917	977.2	46.4	884.1
1918	124.4	0.0	103.0
1919	62.4	0.0	36.5
1920	150.5	64.4	39.7

(b) *The Embargo*—

On April 1, 1919, an order in council was issued to prohibit the exportation of gold, coin and bullion and to give the govern-

[11] Annual Statement of Trade of the United Kingdom, 1914-1918. Accounts Relating to Trade and Navigation, 1919 and 1920.

[12] Monthly Summary of Foreign Commerce, June, 1914-1920.

ment control over gold movements.[13] A law to the same effect was passed on December 23, 1920. The reason for the gold embargo was the decontrol of the exchanges in March, 1919. To have permitted gold to flow freely then would have transferred the world's demand for gold from the United States to Great Britain, the great excess of imports of which would have drained its gold supply very quickly. Furthermore, the countries indebted to Great Britain on merchandise imports were not in a position to ship gold, and therefore Great Britain could not settle with her merchandise creditors in gold. The British gold policy therefore was dependent on the Continental gold policy.[14]

However, after July, 1919, new gold received from the mines might be exported under license. Mine gold from South Africa was offered in London to the highest bidder, and was taken frequently by those countries in which the pound sterling was at a considerable discount. The exports of gold from Great Britain in the latter half of 1919 came from this source. This gold affected but little the settlement of trade balances. These gold exports, however, were only a very small fraction of the British excess of merchandise imports. For example in 1919 the net commodity imports to Great Britain from the United States was $1970 million, but the net excess of exports of gold to the United States from Great Britain was only $42 million. In 1920 the net excess of commodity imports from the United States to Great Britain was $1094 million, and the net excess of imports of gold from Great Britain was only $205 million. The excess of commodity imports into Great Britain in 1920 was £378,800,000, but the excess of exports of gold was only £43,500,000.

South African gold was quoted in London in paper money at a premium over the gold parity, which was 85s. per ounce. The premium represented the depreciation of the British note as truly as if gold and paper circulated side by side in domestic trade. For instance, on November 30, 1920, the demand rate for sterling in New York was $3.48, representing a depreciation of about 28.5 per cent. The gold price in London on the same day was 117s.

[13] For a discussion of the order see the bullion letter of Samuel Montagu & Co., Apr. 3, 1919.

[14] No figures on British gold exports are available prior to July, 1919. Neither trade returns nor any source of financial information furnished statistics of gold exports. The Montagu bullion letter resumed publication of gold shipments in the latter half of 1919.

1d., which represented a depreciation of about 27.5 per cent from the gold parity of 85s. During the week ending January 15, 1921, there was a violent rise of sterling rates in New York, and simultaneously a precisely proportionate fall in the price of gold in London. The high and low gold quotations for the year 1920 were 127s. 4d. and 102s. 7d. and paper money was at 66.7 and 82.8 per cent of parity, respectively. The high and low foreign exchange quotations for the year 1920 were $4.012 and $3.195, or 82.8 and 65.7 per cent of parity, respectively. If gold flows internationally, the depreciation of foreign exchange and the premium on gold represent the discount on paper money. On the other hand, if gold does not flow freely, as in the case of Continental Europe, the depreciation of the exchanges does not correspond so closely to the depreciation of notes.

iii. *The Flow of Capital*

The most important corrective of depreciation of sterling was the flow of capital. British holdings of American securities were sold. European securities quoted on the London exchange were sold in New York. Private loans, both long-term and short-term, were placed by Great Britain in various markets, and finally United States government advances were negotiated.

(a) *The Resale of American Securities*—

Before the United States entered the war there was heavy liquidation of British holdings of American securities. A singular instance was the resale by British owners of an entire railroad in the United States, the New Orleans & Northeastern, at a price of $12,500,000. Messrs. J. P. Morgan & Company, acting as agents for the Southern Railway, concluded the arrangements, involving the transfer of about $6,000,000 in bonds and about $6,000,000 in stock. The proceeds were applied against the purchase of British government 6 per cent exchequer bonds due in 1920.

1. THE PROCEDURE OF THE DOLLAR SECURITIES COMMITTEE —In July, 1915, when sterling was depreciating, the British Treasury instructed the Bank of England to purchase American dollar securities in London and transmit them to New York for sale. In January, 1916, the Committee issued a selected list of 54 American securities, giving daily the New York cable quotation of the previous day as the purchase price. On the first day securi-

ties of a par value of over 2 million dollars were obtained. The list was extended, and by March 17, 1916, over 256 different issues were bought by the Bank of England from private holders. On March 24, 1916, the Treasury introduced the deposit scheme under which securities were loaned to the Treasury. But as the amounts of securities deposited seemed small, an additional income tax of 2s. in the pound was levied to compel the deposit of such securities as the Treasury was willing to purchase. On January 25, 1917, an order in council empowered the Treasury to requisition any securities that it might require for the purpose of strengthening the financial position of the country, thus converting the scheme for mobilizing securities from a voluntary to a compulsory basis. If the Treasury acquired entire ownership, the value of the securities at the current market price was paid. If the Treasury desired only temporary use of the securities, interest and dividends accrued to the holders, plus an additional ½ per cent per annum, calculated on the nominal amount of the securities. There were stringent conditions attached to the granting of permission to sell abroad any holdings of foreign securities. On January 2, 1919, the prohibition on the sale of securities abroad without the permission of the Dollar Securities Committee was removed. The purchase of securities was discontinued, except with regard to those subject to requisition or already on deposit and the purchase of these was discontinued on April 28, 1919. After March 31, 1919, the additional income tax of 2s. in the pound was discontinued, and the return of securities to their owners began on April 1, 1919.

2. AMOUNTS MOBILIZED DURING THE "PEG"—The total amount of securities mobilized was 3112 million dollars, of which 1083 million dollars was purchased and 2029 million dollars was loaned. Of the total amount mobilized, the American securities were 40 per cent. Of the total amount deposited on loan the American securities were only 18 per cent. Of the total amount purchased for resale, the American securities were 82 per cent. The American securities constituted most of those purchased for resale, because the New York market, in which the pound sterling had to be stabilized, was the best market for the liquidation of these securities. Most of the American securities mobilized were sold. Of the 1252 million dollars mobilized, 888 million dollars were sold up to March 31, 1919, and a large part of the remain-

ing 364 million dollars were sold by January 1, 1921. Of the Argentine bonds mobilized about 100 million dollars were sold, and the amount outstanding on October 30, 1920, was 1640 million dollars, most of which consisted of railway securities. For several reasons the Indian and Colonial securities were little affected by the mobilization scheme.

Paish estimated that the total shrinkage in value of securities during the war including the period prior to mobilization amounted to 2260 million dollars. A check computation from the report of the Commissioners of Inland Revenue, showing the income received from foreign and colonial securities, indicates a shrinkage in value of foreign securities of about 2225 million dollars. The very close agreement, within 1½ per cent, may be fortuitous. At all events, the net loss in the value of British holdings was probably near 2 billion dollars. Both figures include the loss in market value, as well as sales of securities.

AMOUNTS OF DOLLAR SECURITIES MOBILIZED ON MARCH 31, 1919 [15]
(in million dollars)

	Purchased	Loaned	Total
Dollar bonds	680	197	877
Dollar shares	241	304	545
Total	921	501	1422
Deduct Canadian securities included	33	137	170
	888*	364	1252
All securities, including Dutch, Scandinavian and sterling bonds and registered stocks	1083	2029†	3112
Percentages of securities purchased and loaned:			
American securities	71	29	100
All securities	35	65	100
Percentage of American securities to total securities	82	18	40

* 1810 different securities. The Statist estimates 1000 million dollars resold up to Oct 30, 1920.

† The Statist estimates that the maximum reached subsequent to the date of the report was 2192 million dollars.

[15] Report of the Dollar Securities Committee, Nov. 20, 1917, submitted to the House of Commons, No. 212, also London Statist, Oct. 30, 1920. A review of the Dollar Securities Committee report is to be found in the London Economist, p. 1033, Dec. 6, 1919, and abstract of the report by A. M. Sakolski in the American Economic Review, June, 1920, p. 413.

3. SALES AFTER THE RELEASE OF THE "PEG"—The sale of American securities by British holders continued after the release of the "peg." For a time the sellers were required to provide an equivalent value in dollars, but on November 11, 1920, this restriction was removed, probably in view of the fact that the Anglo-French loan, maturing October 15, 1920, had been successfullly met. Again, the amount of deposit securities held in August, 1920, was only 1337 million dollars, representing in part collateral for the then unexpired Anglo-French loan. Many of these were subsequently liquidated. The sale of British holdings of American securities affected not only those issued in dollars, but also those issued in pounds. From time to time sterling bonds of American railroads were sold privately at a price which took into account the depreciation of the pound. For example, in December, 1919, a block of £20,000 of Pennsylvania Railroad Closed Consolidated Sterling 3½'s was bought on the basis of $663 for a £200 bond. Normally, the holder of bonds issued in sterling would retain them in the expectation of an appreciation in exchange. It is doubtful whether large amounts of such bonds were sold in the United States.

Furthermore, sterling bonds of foreign governments and cities listed on the London Stock Exchange were liquidated in New York in considerable quantities in 1920 and 1921.

(b) *Sales of European Securities*—

Another corrective of depreciation of sterling was the sale of internal bonds of the United Kingdom. These were bought and traded in extensively in the United States. In addition there were sold in New York several industrial securities which had an international market, such as the shares of the Royal Dutch Company, the "Shell" Transport and Trading Co., Ltd., the DeBeers Mines, Ltd., and the Rand Mines, Ltd. These are discussed in the section on foreign exchange in the United States. Although the total amounts aggregated a considerable sum, only a very small fraction of the total securities outstanding were sold in New York. The control of the companies was firmly held in Europe.

(c) *Foreign Borrowing*—

Borrowing abroad was the chief means of balancing the excess of imports of Great Britain during the war, and thus partly corrected the depreciation of the pound sterling. Both short-term loans and long-term loans, the latter secured and unsecured, were

sold in New York. In addition the British government borrowed of the United States government.

1. RESTRICTION ON THE EXPORTATION OF CAPITAL—*a. The method and effect*—Early in the war, new issues of capital were controlled by the British government. The purpose was primarily to keep the supply of credit at home, and to direct it to purposes essential for the war.

The effect on the distribution of the new issues was striking. In the three years before the war over 80 per cent of the total capital issues in Great Britain were for foreign purposes. The restriction on the issue of capital during the war resulted in a great shortage of capital for home uses, and after the war a larger percentage of new capital was retained at home than before. In the year 1919, about 80 per cent of the total issue was retained for home purposes.

The reasons are obvious. During the period of the depreciation of the pound sterling, lending abroad extensively would have aggravated the depreciation. Furthermore, the pound sterling, if loaned in countries in which it was at a discount, would not yield as profitably as an investment as at home, and finally sterling exchange might be restored to parity by an increase in production in Great Britain, for which purpose increased industrial facilities were required.

BRITISH CAPITAL ISSUES DISTRIBUTED GEOGRAPHICALLY [16]

Calendar year	For Domestic Purposes		For Foreign Purposes		Total Issues *	
	Million pounds	Per cent of total issues	Million pounds	Per cent of total issues	Million pounds	Relative figures 1913=100
1911	28.3	14.7	164.0	85.3	192.3	79
1912	47.1	22.7	160.0	77.3	207.1	86
1913	44.6	18.2	197.5	81.8	242.1	100
1914	40.7	20.4	158.9	79.6	199.6	82
1915	8.3	10.0	74.7	90.0	83.0	34
1916	8.9	25.6	25.8	74.4	34.7	14
1917	8.8	33.2	17.6	66.8	26.4	11
1918	40.3	61.7	25.1	38.3	65.3	27
1919	187.6	79.0	49.9	21.0	237.5	98
1920	331.0	86.2	53.0	13.8	284.0	157

* Excluding British government loans.

[16] London Joint City and Midland Bank monthly circular, January, 1921. For detailed analysis, see article, Capital Issues in 1920. Statist, January 8, 1921, p. 50.

b. *The removal of restrictions*—The removal of the restrictions on the exportation of capital was accomplished in several stages. In January, 1919, holders of Colonial and Indian securities were permitted to sell them abroad. In April, 1919, restrictions on the issue of capital for domestic purposes were removed, and in August, 1919, the embargo on the exportation of capital was lifted.

On January 7, 1919, the British Treasury announced that under the Defense of the Realm Act of January 24, 1917, Colonial and Indian securities might be shipped abroad subject to the condition that the proceeds of such sales or of maturing securities collected abroad should be remitted to Great Britain and retained there. Further, restrictions, affecting securities in which any enemy interest was concerned, continued in force.

In March, 1919, the Chancellor of the Exchequer announced in Parliament that all issues by companies established in Great Britain would no longer require a Treasury license, if the issuing company certified that no part of the proceeds were to be applied for capital purposes outside the United Kingdom. Issues by British companies for capital purposes abroad were permitted only under license. Owing to the decontrol of the exchanges in March, 1919, it was important to limit such fluctuations as might result from the exportation of capital.

On August 19, 1919, the restrictions on the exportation of capital and the importation of securities were completely lifted by the Treasury, except in the case of securities held by or for an enemy during the war. That is, British investors were permitted to buy American securities, although they were hardly likely to do so in view of the adverse exchange rates. The restrictions were abandoned chiefly because the removal of the censorship made their enforcement impossible. On August 28, 1919, the Treasury announced the withdrawal of the following regulations: (1) "41 D. Defense of the Realm Regulation which prohibited remittances from United Kingdom by way of loan or for the purchase abroad of securities or property other than merchandise, or for the purchase of foreign currency as an investment or to be held with a view to appreciation in value. (2) Import Regulation (M.21), which prohibited the importation of bonds, shares, scrip or other documents of title. (3) Defense of the Realm Regulation 30 F par. 4 (6), which prohibited the purchase or sale of securities which had at any time since September 30, 1914, been in physical possession outside the United Kingdom."

2. LONG-TERM LOANS—Before the United States entered the war the private loans placed by Great Britain in this country amounted to $1050 million, consisting of one unsecured loan dated October 1, 1915, due October 1, 1920, for $250 million; a secured loan for $250 million, dated September 1, 1916, and due September 1, 1918; a second secured loan of $300 million dated November 1, 1916, and due in parts November 1, 1919 and 1920; and a third secured loan of $250 million dated February 1, 1917, and due in parts on February 1, 1918 and 1919.

On November 1, 1919 a private British loan amounting to $250 million was placed in the United States, the first after the close of the war. It consisted of 3-year 5½ per cent gold notes due in 1922, and 10-year 5½ per cent gold bonds due in 1929. Both securities were convertible at the option of the holder into 5 per cent National War Bonds of the United Kingdom, sterling exchange being computed for purposes of conversion at the fixed rate of $4.30 to the pound. As the rate of exchange rose above $4.30 the holder would realize an increasing profit, and at exchange parity the seller of a National War Bond at 100 would obtain $113.19.

The Anglo-French loan due on October 15, 1920, was completely paid off at maturity. On March 8, 1920, Mr. Chamberlain announced that the British government was buying Anglo-French bonds in the market at a considerable discount below par. The funds were obtained in part from the loan above referred to as well as from the further sale of British holdings of American securities.

3. UNITED STATES GOVERNMENT ADVANCES—From April 24, 1917, when the United States government advances were authorized, to November 15, 1920, eight months after the Secretary of the Treasury announced that no further advances would be made, the total loans in favor of Great Britain amounted to $4277 million, of which $80 million had been repaid. Up to April 15, 1919, and May 15, 1919, interest was paid by Great Britain out of British funds in the United States, or from further credits of the United States. Interest subsequent to these two interest dates and up to October 15, 1920, and November 15, 1920, amounted to $104 million.[17]

[17] Annual Report Secretary of the Treasury, 1920, pp. 54 and 58.

4. TREASURY BILLS AND SHORT-TERM CREDITS—In addition to the various forms of long-term borrowing, England relied upon treasury bills and short-term credits, which were placed in those countries in which she made heavy purchases.

a. *United States*—The sterling and dollar treasury bills, floated by Great Britain in the United States, have already been referred to in the sections on British public finance and on the stabilization of exchange in the United States. (See pp. 361 and 377.) As early as 1916 the British government attempted to float short-term bills in New York, but the Federal Reserve Board warned its member banks against "freezing" their funds in securities, which though short-term in name were either by contract or through force of circumstances long-term in character. Upon the entry of the United States into the war considerations of prudent banking were displaced by military necessity. After August 1, 1917, the British Treasury successfully issued dollar treasury bills in New York. The rate of interest varied from 5 to 6 per cent and the amount outstanding reached a maximum of about 100 million dollars in 1919.[18] The continually maturing treasury bills proved to be a depressing influence on the exchange rate and therefore the British government continually reduced the amount outstanding by means of gold shipments and the further sale in the United States of the mobilized dollar securities. On November 8, 1920, the amount of British government dollar treasury bills outstanding in the United States was officially reported by Consul General Skinner as $31,540,000. "On December 20, 1920, there were outstanding $18,220,000" and they were being further reduced according to J. P. Morgan & Company. In addition, twelve months' sterling bills, payable at option of the holder in dollars at $4.765, were outstanding in amounts of $28,590,000 on November 17, 1920. The amount had been much larger.[18a] The

[18] Consul General Skinner of London reported the maximum official figures of British dollar treasury bills in the United States as $98,005,000 on September 30, 1919. See Commerce Reports, Dec. 22, 1920, p. 1253. According to J. P. Morgan & Company, "British government 90-day treasury bills were increased to a maximum of $91,055,000 on March 20, 1919. And from Aug. 1, 1917 to Nov. 11, 1918 the maximum outstanding was $84,405,000." See also London cable to Journal of Commerce, Nov. 12, 1920, giving National Debt Office figures of amounts of treasury bills outstanding in the United States.

[18a] House of Commons Debates, November 18, 1920.

total amount of sterling exchange bought in New York by J. P. Morgan & Company for the account of the British government during the period of the "peg," from early 1917 to March, 1919 was close to $4,000 million. On several occasions the amounts purchased were as high as $20 million per day.

b. *Japan*—In July, 1916, Japan supplied the British government with credits in the United States, amounting to $50 million, in exchange for one-year yen treasury bills issued in Japan and renewed in July, 1917. In December, 1916, a British loan, amounting to 100 million yen, was issued in Japan in order to provide the British Treasury with an equivalent dollar credit in the United States. In January, 1918, the British government received from Japan an additional dollar credit in the United States for $50 million, in return for which the British government gave Japan one-year British treasury bills amounting to 80 million yen and a credit in India of 30 million rupees. The reason for this twofold transaction was that Japan had dollars in America which Britain needed, to maintain exchange between New York and London, and instead of making the proceeds available in London the Japanese government provided the British government with 40 million dollars in New York. Then as Japan needed rupees in India to pay for an excess of imports, Great Britain opened a rupee credit in India in favor of Japan in return for which Japan gave the British Treasury additional credit of $10 million in New York.[19]

On February 1, 1919, Great Britain refunded the $40 million of British one-year treasury bills in Japan. The rate was raised from 5½ to 6 per cent.

c. *Neutral Europe*—Owing to the proximity of the neutrals of Europe to Germany and their dependence upon her for some indispensable commodities, the Allied governments had difficulty in raising credits in the neutral countries for the purpose of stabilizing exchange.[19a] After the armistice a financial convention between Spain and Great Britain was consummated whereby Spain agreed to lend Great Britain 75 million pesetas at 5 per cent. Great Britain in return agreed to permit the free importation of Spanish

[19] London Economist, Jan. 26, 1918.

[19a] See Hearings before the Committee on Banking and Currency on S. 3928, "A Bill to Establish a Federal Reserve Foreign Bank," *op. cit.*

oranges and the exportation to Spain of a minimum quantity of 150,000 tons of coal per month. The payment for coal was to be in sterling at 25.18 pesetas, or parity.[20]

A credit in Holland for 75 million florins was opened in favor of Great Britain, but only 50 million florins were taken up.[21]

d. Argentina—In January, 1918, a grain convention was concluded between Argentina and both Great Britain and France. The governments of Great Britain and France agreed to buy in Argentina the surplus of wheat and other cereals up to 2,500,000 tons, to be exported before November 1, 1918. The Argentine government on its part agreed to open a credit in favor of Great Britain and France up to $100 million.[22] Against these advances the Allied governments agreed to deposit notes for two years, bearing 5 per cent interest annually. The financing of the wheat exports from Argentina was done by the Banco de la Nacion. However, the Caja de Conversion was authorized to issue notes against its gold holdings if the Banco de la Nacion exhausted its resources.

The loan was not paid at maturity and was extended. In part liquidation of this loan, Great Britain took over the $50 million loan of Argentina, due in the United States on May 15, 1920, and agreed to meet in London the charges on the Argentine foreign debt. At the same time the Argentine government was to pay the equivalent sum, at a fixed rate of exchange, to the Banco de la Nacion to reduce the British foreign debt.[23]

After the war, Great Britain, France and Italy negotiated for a loan in Argentina for 200 million gold pesos ($193 million) for the purchase of grain in Argentina. This was similar to the convention just cited, except that slightly different exchange rates were fixed. The credits were distributed as follows: 80 million pesos to Great Britain, a similar amount to France, and 40 million pesos to Italy. The period of the loan was to be two years and the rate 5 per cent. The proceeds were to be applied to the purchase of Argentina produce exclusively. The Banco de la Nacion was authorized to open a credit in favor of the government for

[20] Cable from Ambassador Willard, in Commerce Reports, Apr. 1, 1919.
[21] Amsterdam correspondence, London Economist, June 19, 1920.
[22] Commerce Reports, Feb. 9, 1919.
[23] From Tornquist, "Business Conditions in Argentina" reports Nos. 148 and 149 of May 31, and October 31, 1920.

200 million pesos, and the Bank in turn was authorized to apply to the Caja de Conversion for currency notes up to the amounts of the credits used by the three European governments. As the credits were paid off, the Bank was to return to the Caja for cancellation the notes issued under the credit. The Senate refused to ratify the convention because of the fear of the drain on the Caja de Conversion, and the desire to give Germany a similar advantage. The treaty as revised by Argentina was unsatisfactory to the Allies.[24]

5. PREFERENTIAL DISCOUNT RATE—Before the war the central banks of Europe were able to attract funds from foreign countries by raising the discount rates, thus creating a supply of bills. On November 15, 1915, the Bank of England initiated a preferential rate of 4½ per cent on deposits by joint-stock banks, of money representing foreign balances on deposit with them. On these foreign balances the joint-stock banks had been paying a premium of 1 per cent and more over domestic balances. The Bank of England had been paying more on joint-stock bank deposits representing foreign balances than it was getting on its own loans, many of which were made at 3½ per cent. As in pre-war times, the aim was to attract foreign funds to sustain the rate of exchange.

In January, 1919, the Bank of England reduced the rates on joint-stock balances representing French, Italian or Belgian funds, because the currencies of those countries were depreciated in London and the attracting of French, Italian and Belgian funds to London tended to aggravate this depreciation. On August 28, 1919, the Bank of England announced a reduction in its rate of interest on all foreign balances from 4½ to 3 per cent, and the joint-stock banks made corresponding reductions. If American balances in London had been large, the reduction might have driven American money out of the London banks. But American balances were small, and the ruling had practically no effect on them. In fact the rate was reduced in recognition of the fact that the high rate was not effective.

When exchange is upset and fluctuations are wide, slight differences in the annual rate of interest are not likely to attract

[24] London Economist, Oct. 11, 1919, *et seq.* The Review of the River Plate gives details providing for German participation in the agricultural credit.

funds. The possibility of gain or loss on exchange due to wide fluctuations is a far more important consideration than change in the rate of interest of a fraction of 1 per cent. The pre-war mechanism of attracting funds by raising the interest rate was therefore operative only under conditions of fairly steady exchange.[25]

iv. *Other Correctives*

Just as inflation of the currency, the inability to balance the budget, and political and industrial unrest accounted for the decline in exchange, so the improvement of these factors corrected the exchanges. That a definite limit had been set on the fiduciary issue, that the national debt of Great Britain was being reduced and the industrial production gradually increased after December 31, 1919; all these factors accounted for the betterment of British exchange. As the Cunliffe Committee stated in its final report, "Increased production, cessation of government borrowing and decreased expenditure both by the government and by each individual member of the nation, are the first essentials to recovery. These must be associated with the restoration of the pre-war methods of controlling the currency and credit system of the country for the purpose of reestablishing at an early date a free market for gold in London."

D. The Invisible Balance of Trade

The outlook for British exchange depended upon the invisible factors which constituted a very important part of the British trade balance.

i. *Foreign Investments*

The foreign investments of Great Britain rose from the equivalent of \$2750 million in 1854 up to about \$20,000 million in 1914. The estimates were made by Sir Robert Giffen, A. C. Bowley and F. W. Hirst, from the income tax returns. Sir George Paish's estimate in 1910 was based, in addition on the statements of several thousand British companies.

[25] Commercial and Financial Chronicle, July 26, 1919 and Aug. 30, 1919.

BRITISH FOREIGN INVESTMENTS [26]
(in millions sterling)

Date	Amount	Authority
1854	550	Bowley
1875	1,400	Bowley
1885	1,302	Giffen
1885	1,700	Bowley
1890	2,000	Bowley
1895	1,600	Hirst
1905	2,025	Hirst
1909	2,332	Bowley
1910	3,192	Paish
1914	4,200	Paish

To obtain the 1914 figures, the average annual increase of foreign investments is used, which Hobson estimated at £130 million and Paish £152 million.

Of the total foreign investments of about £3,200 million in 1910 about 53 per cent was invested in the Americas, 16 per cent in Asia, 14 per cent in Africa, 12 per cent in Australasia and 5 per cent in Europe. British investments in the colonies totaled £1,554 million and in foreign countries £1,638 million. Investments in the United States were estimated at £688 million, in Argentina £270 million, and in Mexico £87 million. Investments in British North America were estimated at £373 million, and approximately similar amounts in the British dominions and colonies in Asia, Africa and Australia.

ii. *War-Time Changes in Invisible Credits*

Before the war, in spite of the large excess of imports of Great Britain, the annual foreign investments of Great Britain increased, the pound sterling was not depreciated, and as a rule more gold was imported than exported. The adverse balance of trade was

[26] Arthur H. Bowley, Annals of Foreign Trade in the 19th Century 1905 Edition, pp. 76-77. Report of the Commissioners of Inland Revenue, quoted by Sir George Paish in Journal of Royal Statistical Society, Sept., 1909. C. K. Hobson, The Export of Capital, London, 1914, p. 128. The London Economist, Jan. 23, 1886, p. 105-106. G. R. Porter, The Progress of the Nation, revised by F. W. Hirst, 1912 Edition, pp. 701-702. Journal of the Royal Statistical Society, Jan., 1911, pp. 177-186. Report of Federal Trade Commission on Cooperation in Export Trade. Washington: Government Printing Office, Part I, pp. 66-72.

being met by invisible exports. In the annual returns of foreign trade of Great Britain imports are recorded as c.i.f. (including cost, insurance and freight) and the value of goods exported as f.o.b. (free on board); the value of imported goods include charges for insurance and shipping, which are due to British companies chiefly, but the value of exports does not include similar charges, which are due also chiefly to British companies. This method of reporting increases the apparent excess of imports, or reduces the invisible credit balance. In addition to shipping services and insurance, British bankers and discount houses had annual invisible credits due them. Again, tourists spent large sums traveling in Great Britain.

(a) *Investments*—

Sir George Paish estimated that in 1914 British foreign investments amounted to £4000 million and that annual interest was £200 million. During the war £1000 million of British holdings of foreign securities were sold and the annual invisible credit was reduced by £50 million. Furthermore, Great Britain borrowed abroad £1400 million, and an annual invisible debit of £70 million was added. The net change therefore was a deduction of £120 million from the annual invisible credit, leaving an annual credit balance of £80 million. The loans to the Allies amounted to £1739 million, but of this about one-third was loaned to Russia and one-half, or £870 million, had already been written off as a poor debt. Ultimately, Great Britain expects to receive on the remaining £870 million about £44 million interest annually. For some time, however, the interest has been deferred and the annual income from investments for 1920 was therefore estimated by the British Board of Trade at £100 million, as compared with a pre-war estimate of £200 million.

(b) *Shipping Earnings*—

Shipping earnings do not represent a net profit. From gross earnings deductions are made for wages paid to English seamen, supplies bought in England, and other expenditures, chiefly in England. However, gross earnings are credits in the international balance of trade to the same extent as British exports. The estimate of shipping earnings in 1903 was £90 million, according to Sir Robert Giffen, and £100 million in 1910, according to Sir

George Paish. Sir F. W. Lewis at the annual meeting of Furness, Withy & Co., a large shipping company, estimated the total for 1919 at £350 million to £400 million. The increase over the pre-war figures was due to the increase in chartering rates, chiefly. For 1920 the British Board of Trade estimated that the shipping earnings would be £500 million, later reduced to £340 million.

(c) *Other Earnings*—

For 1903 Sir Robert Giffen estimated the earnings of mercantile houses, insurance companies and banks, doing business abroad at £25 million. Owing to inflation, income from these sources was estimated by the British Board of Trade to be £40 million. Sales of old ships to foreigners, expenditures of tourists, and family remittances abroad were estimated to be £10 million before the war and £15 million in 1919 and 1920. However, the items are omitted from the calculation below.

(d) *Recapitulation*—

A summary of pre-war and post-war debits and credits is given herewith:

BRITISH TRADE BALANCE[27]
(in millions sterling)

Source	1913	1919	1920
Invisible credit, estimated—			
Net income from investments	200	80	120
Net shipping income	130	400	340
Other services	30	40	40
Total	360	520	500
Trade debit, actual—			
Excess of merchandise imports	134	663	379
Net credit	226	143*	121
Net gold imports	13	...	42

* Net debit.

[27] British Board of Trade Journal, Jan. 15, and Aug. 12, 1920, and Feb. 3, 1921, reprinted in Commerce Reports, Feb, 24, and Sept. 17, 1920, and Mar. 16, 1921. See also Edgar Crammond on British Finance During and After the War, Quarterly Review, July, 1918. Hartley Withers, The

The excess of imports of Great Britain declined in 1920. In 1919 there were large imports both on account of balances on war contracts and on account of restocking empty stores. But in 1920 imports were limited to essentials. In 1919 the price of commodities was about twice as high as in 1913. Therefore while the value of imports in 1919 was twice as great as in 1913, the quantity was only four-fifths as great.

As prices fall, the purchasing power of interest from foreign investments will rise and will balance a larger quantity of imports than under inflated war prices. As an offset, however, shipping earnings will probably decline as wages and the price of chandlers' stores decline. As a result of the net loss of investment earnings of £100 million per annum, the pre-war invisible balance of £360 million will in future probably be £260 million. To balance the debits and credits of international trade the excess of commodity imports will have to be reduced. For none of the invisible credits can be increased as largely or as promptly as imports can be reduced. Interest on British foreign investments cannot be rapidly increased, nor can shipping earnings after the war increase, owing to the competition of Japan and the United States developed during the war.

According to the British Board of Trade figures there was a credit in the 1920 British trade balance of about £121 million, and yet the pound sterling was at a heavy discount in New York. The explanation may be that the British Board of Trade estimates for shipping gearings are too large, a not improbable assumption, or else that England extended liberal credits to the Continent to stimulate her exports, and that her credits were "frozen," but she had to liquidate her debts to the United States. In general England's debtors, both on war loans and on merchandise, are the poor countries of Europe, and her creditors both on war loans and on merchandise are the relatively rich countries of the Americas and Asia. As the Cunliffe Committee stated, "The difficulties of the foreign exchanges' position are aggravated by the grant of long-term loans and credits to enable foreign states or their nationals to pay for exports from this country. Few of these loans and

Business of Finance, E. P. Dutton & Co. London Bankers' Magazine, Sept., 1919. London Economist, Oct. 17, 1919. Review of Barclay's Bank, Feb., 1919 and Oct., 1919. C. K. Hobson, The Measurement of the Balance of Trade. Economica, London, May, 1921, pp. 132-147.

credits will be liquidated at an early date. The large payments which we have to make to America, North and South, for necessary imports of foodstuffs and raw materials from those countries make it essential that we, in our turn, should secure payment in cash for as large a proportion as possible of our exports, visible and invisible. We therefore recommend that preference should be given to exports to countries which are able to make payments in ordinary course of trade."

CHAPTER XI

FRENCH FOREIGN EXCHANGE[1]

A. Trade Balance

i. *Total Investments*

Before 1850 French foreign investments were negligible in amount. In the fifty years from 1870 French foreign investments grew to about fr. 40,000 million, as follows:

French Foreign Investments[2]

Year	Amount, million francs	Authority
1870	12,000	Leon Say
1880	15,000	Leroy Beaulieu
1910	40,000	Walter Zollinger
1914	40,000	Louis Klotz

The total pre-war investment of France yielded an invisible credit of about fr. 2,000 million per annum, enabling her to have an excess of imports and at the same time maintain her exchange at parity.

ii. *Classification by Countries*

The distribution of French investments abroad indicates the very striking fact that Russia was the principal outlet for French

[1] See also Le Problème des Changes chez les Belligérants, Rapport Générale, 1919, No. 6158. Budget report of the Chamber of Deputies.

[2] C. K. Hobson, The Export of Capital, pp. 139, 141, 142 and 163. Walter Zollinger, Die Bilanz der Internationalen Wert Uebertragungen, p. 1912. Hanz Henger, Die Kapitalsanlage der Franzosen in Wertpapieren, pp. 10, 11 and 89. Federal Trade Commission report on Cooperation in American Export Trade, vol. 1, p. 71, Washington: Government Printing Office, 1916.

investments, with Austria-Hungary and Turkey following. An unofficial estimate of French holdings on which interest had not been paid since the beginning of the war, follows:

Country	Million francs
Russia	11,000
Austria-Hungary	4,000
Turkey	3,000
Bulgaria	600
Servia	500
Mexico	700
Total	19,800

About 50 per cent of the total investments of France were either in enemy countries, or in countries affected by revolution or stricken by war and therefore unremunerative during the period. The estimates of French pre-war investments in Russia vary. Edmond Théry set the figure at fr. 12,000 million. Another estimate, set the total at fr. 17,636 million, distributed as follows:

	Million francs
State issues and municipal bonds guaranteed by the state	15,268
Industrial shares and debentures	2,368
Total	17,636

Another estimate put the total French holdings of Russian securities at fr. 19,000 million, distributed as follows:

	Million francs
For the Russian Imperial Treasury	7000
Railroads and public works under government control	9000
Commercial enterprises in private hands but with government guaranty	3000

An official estimate, given in reply to an interpellation in the French Senate, gave the French holdings of Russian government stock as fr. 13,897 million, and total holdings, including loans to cities and industries, as fr. 25,000 million.[3]

[3] Journal Officiel, Sénat Débats, Mar. 28, 1920.

The investments in Bulgaria were estimated at fr. 700 million,[4] and in Turkey at fr. 3385 million.

iii. *Foreign Loans and Borrowings During the War*

During the war France loaned fr. 8200 million to her allies. In addition she furnished war materials valued at fr. 6500 million.[5] Advances on account of German indemnity payments for the reconstruction of the devastated areas amounted to over fr. 20,000 million, by the end of 1920, making a total of about fr. 34,700 million.

The foreign loans of France were offset by foreign borrowings. The cash advances by the United States government up to November 15, 1920, amounted to $2966 million and the sales on credit of surplus war supplies to France amounted to $400 million.[6] The advances by Great Britain up to March 31, 1920, amounted to £568 million.[7] In addition to the government debt France owed abroad on a fixed debt, a floating debt, and bank credits. The private borrowings of France in the United States included the loans of Bordeaux, Lyons, and Marseilles for $45 million, the loan of the City of Paris for $50 million, and the 1920 unsecured loan for $100 million. A loan for 100 million yen was outstanding in Japan. The floating debt included treasury bills sold in England, of which £10 million were outstanding on January 1, 1920, $25.5 million of treasury bills outstanding in the United States, and 30 million yen of treasury bills outstanding in Japan. Bank credits totaling the equivalent at par of fr. 1400 million were outstanding, in Spain, Switzerland, Norway, Sweden, Holland, Argentina, England, and Uruguay.

iv. *The Post-War Position of France*

If the advances on account of the German indemnity are included among the war-time loans of France her war-time borrow-

[4] Estimate of Professor Athenase Jaranoff, University of Sofia, in the *Bulletin Officiel du Comité National d'Expansion Economique,* quoted by Trade Commissioner E. G. Mears, Constantinople, Commerce Reports, Jan. 3, 1920.

[5] Address of M. Louis Klotz, to Chamber of Deputies, Oct. 22, 1919, and Nov. 7, 1919.

[6] Report of the Secretary of the Treasury for the year 1920, pp. 54 and 66.

[7] Budget address of Austen Chamberlain, Chancellor of the Exchequer.

ings are fully offset. However she borrowed in foreign currencies and the conversion in francs in spite of their depreciation was at parity. On the other hand, French loans to her allies and advances on account of the indemnity were in depreciated francs.

The pre-war investments of France, according to M. Klotz, amounted to fr. 40,000 million. The total war borrowings (from the United States, Great Britain and other countries) were equivalent at parity to fr. 33,000 million. The total war loans (to Russia, Italy and Belgium and minor allies) amounted to fr. 13,500 million, leaving a balance against France of fr. 19,500 million, which deducted from the total pre-war investments, leaves a net credit of fr. 20,500 million. On the other hand, the advances for reconstruction work in the devasted areas, which are to be refunded out of the German indemnity payments, amount to over fr. 20,000 million. But France is indebted to financially strong countries and is the creditor of financially weak ones. To consider her debits and credits as equally good risks is unjustified. The extent of the invisible balance of France depends upon many uncertain factors, such as the cancellation of the loans by Great Britain and the United States, the repudiation of Russia's debt to France, the ability of Germany to pay the indemnity and the coöperation of the debtors of France.

B. The Causes of Depreciation

The quotation of the French franc has been discussed at length in the section on foreign exchange in the United States. After the release of the "peg" franc exchange declined fairly continuously until April, 1920, recovered slightly up to October, 1920, and declined practically continuously thereafter, throughout the rest of the year.[8]

i. *Commercial Causes*

The increase of the excess of imports was the chief cause of the depreciation of the franc. Before the war the excess of imports of merchandise was about fr. 1500 million. This was more than

[8] Liesse, André, La Hausse des Changes, Economiste Français, Feb. 7, 1920, pp. 161–4. Décamps, Le Crédit International et la Crise du Change. Discussions de la Société d' Economie Politique, Apr. 6, 1920. Economiste Français, Apr. 24, 1920.

balanced by the income of about fr. 2,000 million from investments, by earnings of the French mercantile marine, and by the very substantial expenditures of foreigners, resident, studying or touring in France. During the war all these three sources of invisible credits were greatly reduced. Worse, the excess of imports increased enormously, reaching the high figure of fr. 24,000 million in 1919.

FOREIGN TRADE OF FRANCE [8]
(in million francs)

Date	Imports	Exports	Excess of Imports		Ratio of exports to imports. Per cent
			Amount	Relative figures, 1913 = 100	
1907	6,222	5,597	625	41	90.1
1913	8,422	6,880	1,542	100	81.7
1914	6,402	4,869	1,533	99	76.0
1915	11,036	3,937	7,099	460	34.6
1916	20,640	6,215	14,425	935	30.1
1917	27,554	6,013	21,541	1395	21.9
1918	22,301	4,722	17,579	1140	21.2
1919	35,799	11,879	23,920	1550	33.2
1920*	35,405	22,435	12,970	840	63.3

* Tentative.

ii. *Financial Causes*

An important financial factor in the depreciation of French exchange was the loss of income from French capital, invested in the enemy countries, Austria-Hungary, Bulgaria, and Turkey, and in Bolshevik Russia. In addition loans were made during the war, to the weak countries allied with France: Italy, Servia, and Rumania, and after the war France made large loans to support her military policy in Poland. On December 29, 1920, a credit of fr. 400 million was voted by the Chamber of Deputies for Poland at the request of M. Raiberti, the Minister of War. On the other hand, France became indebted to financially strong countries, the United States and Great Britain. At the time they were made these loans strengthened French exchange, but upon their maturity

[8] Documents Statistiques sur le Commerce de la France, 1913, 1919.

greatly depressed it. The French foreign debt on December 31, 1919, was fr. 33,661, or 15.6 per cent of the total French debt of fr. 215,399 million.

iii. *Fiscal and Currency Factors*

The depreciation of the franc was in no small measure due to the inflation of the currency. The French budget did not balance and the Bank of France had to issue notes to the state against short-term treasury bills. In 1913 the French budget was fr. 4700 million, in 1920 the budget amounted to fr. 47,900 million. True, the ordinary expenses amounted to only fr. 21,700 million, but the extraordinary expenses amounted to fr. 5400 million and the special expenses, "recoverable from Germany under the Treaty of Peace," amounted to fr. 20,700. The service of the debt in 1920 was nine times as great as in 1913. The ordinary budget was five times as great as in 1913. These figures indicate the cause of the lack of confidence in the French financial administration, and of the depreciation of her exchange. As a result of the increase in the budget, and the inability to raise adequate revenue by taxation, the note issues of France increased continually throughout the war. At the end of 1913 the notes outstanding amounted to fr. 5714 million, at the end of 1918, the amount was fr. 30,250 million, and on November 18, 1920, it was fr. 39,256 million. Since the exchange rate is a measure of the probability of the redemption of paper in gold, a sevenfold increase in the volume of paper money could not fail to cause a heavy depreciation of French exchange.

C. The Effects of Depreciation

i. *Commercial Effects*

The effect of the depreciation of exchange was the same as in the other countries of Europe. Exports were stimulated, and imports of non-essentials were checked. The imports of essential goods, such as food and reconstruction materials rose as exchange fell, increased the cost of living and the cost of rehabilitation of the devasted areas, and delayed the return to normal conditions. Finally, the depreciation of the franc resulted in barter and the elimination of exchange transactions.

During the year 1920 French exports increased steadily each

month practically in the same ratio as the rate of exchange depreciated—on the other hand, imports were fairly steady. An analysis of the imports for the years 1919 and 1920 shows a decline in the importation of foods in 1920 and an increase in the importation of raw materials.

Foreign Trade of France by Months for 1920 [10]
(in million francs)

Month	Imports	Exports	Ratio of exports to imports. Per cent
1913, average	702	573	81.7
1919, average	2981	990	33.2
1920:			
January	2002	722	36.1
February	2642	1324	50.1
March	3123	1338	42.8
April	2888	1377	47.6
May	2387	1210	50.7
June	2589	1809	69.8
August	2800	2399	85.7
September	2628	2152	82.0
October	2595	2333	90.0

In the first two months of 1921 the trade balance was reversed and the excess of exports amounted to fr. 185 million.

The corrective effect of depreciated exchange is shown, though less strikingly in a comparison by years.

Foreign Trade of France [11]
(in million francs)

Year	Imports	Exports	Ratio exports to imports. Per cent	Excess of imports	Relative figures, 1913 = 100
1913	8,421	6,880	81.7	1,541	100
1918	22,301	4,723	21.2	17,579	1140
1919	35,799	11,879	33.2	23,920	1550
1920*	35,405	22,435	63.3	12,970	840

* Tentative.

[10] Documents Statistiques sur le Commerce de la France.
[11] From official returns.

The stimulation of French exports frightened the Swiss merchants, who in January, 1921, petitioned their government to restrict the imports from countries with depreciated exchange. Owing to the high value of the Swiss franc in France and in other neighboring financially exhausted countries, trade by means of bills of exchange between France and Switzerland was checked and barter became quite common. Barter arrangements were developed between the chambers of commerce of Switzerland and of other countries.

ii. *Financial Effects*

(a) *The Breakdown of the Latin Monetary Union*—

As a result of the depreciation of French exchange the Latin Monetary Union broke down. Its silver coins, which had been interchangeable in France, Italy and Belgium, were smuggled into Switzerland where the franc had a higher purchasing power than in France. In spite of the fact that Switzerland prohibited their importation, and that the other countries in the Union prohibited their exportation, more than half of the total 5-franc pieces issued by all the members of the Union came to be held in Switzerland. In October, 1920, French silver coins of 2 francs or less were withdrawn from circulation in Switzerland, and by April, 1921, all French, Belgian and Italian 5-franc pieces were withdrawn from circulation. (The effect of the depreciation of the French franc on the Latin Monetary Union was treated more fully in the section on French credit and currency.)

(b) *The Effect on Foreign Loans and Borrowing*—

Repayments on the credit opened in Spain in favor of France in 1918 began in March, 1920, at the rate of 35 million pesetas per month. Although the loan amounted to 420 million pesetas, or an equal amount of francs at gold parity, at the depreciated exchange the repayment required fr. 1000 million. At the time of the loan, in February, 1918, the franc was equivalent to 70 per cent of parity in Spain, and to only 38 per cent in April, 1920.

Corresponding to the increased number of francs needed to repay her creditors abroad, some of the debtors of France need less of their currency to repay her. France had a loan outstanding in Haiti, amounting to fr. 75 million, and in view of the depre-

ciation of exchange—the franc was quoted at about one-third of its gold parity—Haiti negotiated for its repayment, in order to make a profit of almost $10 million.[12]

The invisible balance of France was upset. Before the war the purchasing power of the income from foreign investments was sufficiently large to pay for the French excess of imports. As the franc depreciated, the purchasing power of the invisible credits became grossly inadequate. Deflation in France and the appreciation of the franc will hasten the return of an equilibrium between visible and invisible balances.

D. Correctives [12a]

The correctives of depreciation were stated to be a decrease of the excess of imports, gold shipments, and the flow of capital. The chief corrective of depreciation of the franc during the war consisted of loans by both Great Britain and the United States to their co-belligerent. It was an evidence of coöperation among the Allies that French exchange did not sink further during the war. In 1917 the Minister of Finance appointed a committee known as the *Commission des Changes,* which included representatives of the Ministry of Finance, the Ministry of Trade, and the Bank of France, whose function was to study the financial consequences of depreciated exchange and to propose measures to correct them.[13]

i. *Commercial Correctives—*

The self-corrective character of depreciation of exchange has been explained elsewhere in this book. In addition, the French government adopted the policy of deliberately restricting imports and stimulating exports. It issued a list of luxury articles, the importation of which was forbidden. Goods intended for reëx-

[12] Washington dispatch, New York Times, Oct. 28, 1920. Journal of Commerce, Oct. 30, 1920.

[12a] Liesse, André, La Question des Changes Étrangers, Remèdes Empiriques et Remèdes Normaux. Economiste Français, Oct. 11, 1919, pp. 449–51.

[13] On March 21, 1919, an interministerial committee was created, to control exports and imports and to investigate cases and make recommendations, when the embargoes require modification. Journal Officiel, March 21, 1919. Economiste Français, March 29, 1919, p. 395.

ques et Remèdes Normaux. Economiste Français, Oct. 11, 1919, pp. 449–51.

portation were exempted.[14] The statesmen of France urged the purchase of goods in countries whose exchange rate was more depreciated than the franc and the restriction of purchases in Great Britain and the United States.

ii. *Gold Shipments*

Exports of gold were not used to any extent to correct the exchanges. The 1918 report of the Bank of France states that fr. 2037 million of gold was held abroad, of which fr. 1955 million was in England as security for loans by the British Exchequer and by the Bank of England. This gold was to be returned to France upon the repayment of the loans. France pursued a policy of husbanding rather than using her gold supplies. Except during the year 1915, the trade returns show net imports of gold, in the three classes, coin, bullion, and leaf and mineral gold.

IMPORTS AND EXPORTS OF GOLD[15]
(in million francs)

Year	Imports	Exports	Net imports
1913	593.4	75.2	518.2
1914	849.0	72.2	776.8
1915	38.6	117.9	79.3*
1916	61.8	2.7	59.1
1917	75.4	3.1	72.3
1918	13.8	1.2	12.6
1919†	15.2	0.3	14.8

* Six months. † Net exports.

Upon the entry of the United States into the war, the exports of gold practically ceased. Up to that time gold was shipped to the United States, either directly or through Great Britain, in order to create an easy money market there and to facilitate

[14] Cablegram to State Department from American Embassy at Paris. Washington, May 3, 1920. See also Paper No. XI, Exchange Control, Brussels Financial Conference, p. 115. Similar laws were passed May 6, 1916 Mar. 22, 1917, Jan. 20, 1919, and Dec. 30, 1919. See Journal Officiel.

[15] Tableau Général du Commerce et de la Navigation, 1913-1918, and monthly returns for 1919.

borrowing by the French government. Except in 1915 the exports of gold were more than offset by purchases of gold abroad. The total increase in the gold holdings of the Bank of France during the war of about fr. 2400 million were obtained from domestic hoards.[16]

UNITED STATES IMPORTS OF GOLD [17]
(in million dollars)

Fiscal year	Total imports	Imports from France
1914	66.5	1.2
1915	171.6	11.6
1916	494.0	0.0
1917	977.2	0.0
1918	124.4	0.0
1919	62.4	0.0
1920	150.5	0.7

iii. *The Flow of Capital*

(a) *Restrictions on the Export of Capital*—

On August 1, 1917, a law was passed requiring that a register of foreign exchange transactions be kept by all persons that collected, bought, sold, negotiated or discounted foreign currency or bills, coupons, shares or bonds, the amount or proceeds of which were payable abroad in foreign money, or after negotiation abroad were held at the disposal of foreigners. Dealers were obliged to enter in the register the nationality and domicile of all persons transacting any foreign exchange business. The transactions included orders given in France for the sale abroad of francs or bills in francs, checks issued in France and presented for payment after having been negotiated abroad, checks drawn on France or payments in francs on foreign orders for more than fr. 10,000.[18]

The exportation of capital was prohibited by a law of April 3, 1918. Residents of France were forbidden to send out of the country for the purpose of sale any securities which would result not in a supply of francs but in a supply of foreign currency, to be used in violation of the existing laws. Residents of France were

[16] Report of the Bank of France, 1918.
[17] June Monthly Summary of Foreign Commerce, 1914 to 1920.
[18] Decree of Sept. 4, 1917.

likewise prohibited from subscribing abroad to new issues, or from making loans to persons outside of France, or from purchasing any securities, property or goods if such a purchase resulted in a transfer of funds from France. The importation into France of all securities representing an interest in a property or a mortgage was prohibited.

The *Commission des Changes* provided for the administration of the laws concerning foreign exchange.[19]

(b) *Sale of Securities*—

Early in the war France liquidated some of her securities in London, such as the Brazilians, and the French international favorites, Rio Tintos, Royal Dutch, "Shell," and de Beers.[20] After the war the depreciation of the franc stimulated the sale in neutral countries of French holdings of foreign securities. A steady stream of Swiss securities was shipped from France during the latter part of 1919 to such an extent as to disorganize the Swiss stock market. For example, prime 3½-per cent Swiss railway bonds on some days declined as much as 3 per cent. The securities which the French investors refused to surrender to the government to mobilize during the war were now sold in great quantities.[21] Yet the total sale of French holdings of foreign securities have not been very large, less than fr. 600 million according to one authority.[22]

(c) *Private Borrowing Abroad*—

1. Mobilization of securities—In the early part of 1916, M. Ribot, the Minister of Finance, requested the British authorities to permit dealings in French holdings of foreign securities on the London Stock Exchange. The French government called on the French holders of securities negotiable in London to turn them over for sale, in order to supply the state with foreign funds, in exchange for which the state made payment in treasury bonds.

[19] Paper No. XI, Brussels Financial Conferences, *ibid.* Also Journal Officiel, Apr. 4, 1918. Commerce Reports, Apr. 16, 1918, and Apr. 29, 1918. London Economist, Feb. 15, 1919, p. 215. Information, Paris, Jan. 1, 1920.

[20] London Economist, Mar. 25, 1916 and May 27, 1916.

[21] Frankfurter Zeitung, Dec. 10, 1919.

[22] Report of M. Descamps, head of the Securities Department of the Bank of France, at the October meeting of the Société Français d'Economie Politique, Nov., 1920.

The Bank of France arranged the transactions and devoted the proceeds to the payment of French debts in England. Owing to the limited capacity of absorption of the British market and to other difficulties this plan was not very successful, and arrangements were devised for mobilizing French holdings of foreign securities. Later, in 1916, M. Ribot called for the deposit or surrender of neutral, including American, securities. These mobilized securities were used as collateral for loans placed in the United States. The securities listed included Dutch, Swiss, Scandinavian, Spanish, Egyptian, Argentine, Brazilian and Uruguayan securities. The French Treasury paid 25 per cent in addition to the net annual return of securities deposited with it and in the event of their sale, the owners were paid the highest market quotation during the preceding quarter.[28]

By the end of December, 1917, the Bank of France reported that the total securities mobilized amounted to fr. 640 million, consisting of over 774,000 securities.

2. TREASURY BILLS AND CREDITS OPENED—The grand total foreign debt of France on January 1, 1920, amounted to fr. 62,370 million, counting 10.75 francs to the dollar, or about 30,200 million gold francs. Of the total foreign floating debt 88.1 per cent was in treasury bills sold abroad and 11.9 per cent in bank credits.

a. *In Great Britain*—On April 14, 1916, the French and British governments entered into an agreement to stabilize French foreign exchange. Under the terms of this agreement gold was exported by the Bank of France to the Bank of England, and Great Britain granted credits, both unsecured and secured by gold and neutral stocks and bonds. Of the total French short-term foreign credits Great Britain extended the largest part. The English Treasury and the Bank of England also held deposits of French treasury bills against which British credits were opened. These two items combined constituted over 85 per cent of the total French foreign floating debt. After the release of the "peg" and the elimination of the support of the British Treasury and of the Bank of England, French treasury bills were sold abroad to correct French exchange.

[28] Economiste Français, Feb. 9, May 13, 1916; Journal Officiel, May 5, 1916. London Economist, June 10, 1916.
Bourbeau, Marcel, La Bourse des Valeurs de Paris Pendant la Guerre, Paris, 1921. Part III.

b. *In the United States*—During the war a number of French corporations opened credits with American bankers in order to finance exports to France. These credits were secured by neutral bonds as collateral and ran for three months with the option of five renewals. In February, 1916, the munitions works, Schneider-Creusot, placed a short-term loan of fr. 150 million through a syndicate of bankers in the United States. The French private banks and bankers coöperated in the task.

FOREIGN FLOATING DEBT OF FRANCE, JANUARY 1, 1920
(in million francs)

Items	Amount	Per cent of total
Treasury bills:		
Deposited in the English treasury	17,559	73.6
Deposited in the Bank of England	2,654	11.0
Sold in England	409	1.7
Total in Great Britain	20,622	86.3
Sold in the United States	274	1.1
Sold in Japan	158	0.7
Total treasury bills	21,054	88.1
Bank credits:		
Spain	1,221	5.1
Uruguay	429	1.8
Switzerland	281	1.2
Argentina	261	1.1
Holland	221	0.9
England	170	0.7
Norway	139	0.6
Sweden	116	0.5
Total foreign bank credits	2,838	11.9
Total floating foreign debt	23,892	100.0
Total fixed foreign debt	38,478	
Total foreign debt	62,370	
Total domestic and foreign debt	238,474	

Before the United States entered the war, French treasury bills in francs were sold in the New York market. However, the

warning of the Federal Reserve Board in November, 1916, checked the development of a market for them. After the release of the "peg," French Treasury bills in dollars were sold in New York. On August 1, 1919, J. P. Morgan & Company began the sale of 60-and 90-day French treasury bills along lines similar to the sale of British dollar treasury bills since August, 1917. The limit of the total issue was to be $50 million and of the weekly maximum $5 million. The rates fluctuated around 6 per cent and were slightly higher than on British bills.

c. *Spain*—In June, 1916, French merchants received a credit from Spain of fr. 20 million monthly for six months. In March, 1918, France and Spain entered into a trade agreement to permit the interchange of products which were badly needed in either country for goods which were in abundant supply in the other. An important part of the agreement was that the Spanish government authorized a consortium of Spanish bankers and merchants to open in favor of a consortium of French bankers monthly credits not to exceed 35 million pesetas per month for the ten months of 1918, or a total of 350 million pesetas for the remainder of the year. These credits were guaranteed by the deposit with the Bank of Spain of Spanish securities and French Treasury obligations payable in pesetas in Spain.[24] The margin of collateral in excess of the loan was 40 per cent. The bills ran for 90 days but were renewable up to two years.

The total debt in Spain in the early part of 1920 amounted to 455 million pesetas, which were due beginning March, 1920, in monthly installments of 35 million pesetas. The Spanish government agreed to postpone the initial repayment until March, 1921.[25]

d. *Japan*—In July, 1917, the first issue of French yen treasury bills, amounting to 50 million yen, were placed with bankers in Japan, for the purpose of financing Japanese exports. On November 12, 1918, the French government obtained another banking credit, amounting to 50 million yen and gave French yen exchequer bonds as collateral. The bonds matured in three years, bore interest at 6 per cent and were issued at 98.[26]

[24] See the author's International Commerce and Reconstruction, p. 80.

[25] L'Europe Nouvelle, Jan. 24, 1920. Madrid dispatch to Journal of Commerce, Dec. 10, 1920.

[26] Japan Chronicle, Nov. 6, 1918. Announcement of Akira-Den, the Japanese Financial Commissioner in New York, Nov. 25, 1918. Commerce Reports, Jan. 22, 1919.

e. *In other countries*—In May, 1919, Canada granted a credit of $25 million to France and like sums to Belgium, Greece and Rumania.

In 1918 the Argentine government extended a credit of $100 million to France. (This was discussed in conjunction with the British borrowings in Argentina.) A balance of $17 million due in 1921, was extended for another year. France also opened short-term credits in Holland amounting to 30 million florins.[27] Credits were also obtained by France in Sweden, Norway, Switzerland and Uruguay.

3. LONG-TERM BORROWINGS—France borrowed on long-term loans. On July 1, 1920, there were outstanding in the United States $250 million of French government loans and $95 million of loans of the cities of Paris, Lyons, Marsielles and Bordeaux.[28] There had also been placed secured external loans in the United States, amounting to $400 million, which have been discussed in the chapter on French public finance. Furthermore, the internal loans of France were sold extensively in the American market. In February, 1920, the 5 per cent internal loan then floated was extensively sold at the rate of $75 per thousand francs, which corresponded to the then prevailing rate of exchange. To facilitate borrowing by municipalities the French government authorized them and the departments of France to borrow abroad for periods not exceeding 30 years, subject to the approval of the national government as to the rate of interest, the maturity and the debt limit.[29]

(d) *United States Government Advances*—

Upon the entry of the United States into the war the financial difficulties of France were relieved. Abundant credit was forthcoming. Up to November 15, 1920, France had obtained $2997 million and had repaid about $31 million. Of this amount $1,027 million was extended after the signing of the armistice, and $50 million was extended after April 10, 1920, when all government advances, except on outstanding commitments, ceased. The interest accrued and unpaid on advances to France amounted to $211 million on November 15, 1920. Credits opened by the War

[27] Amsterdam correspondence, London Economist, June 19, 1920.
[28] Guaranty Trust Co. statement and Federal Reserve Bulletin July, 1920.
[29] Journal Officiel, Sept. 30, 1920.

Department in favor of France for the purchase of army supplies amounted to $400 million. These supplies were sold at a profit to the French consumer and enabled the French government to reduce its internal floating debt and to help balance its budget. The total debt of France to the United States government on November 15, 1920, amounted to $3577 million.

In addition to the advances thus made, the United States government placed dollar credits by the American Expeditionary Force at the disposal of France in exchange for francs needed in France. The credits thus made available to the French government from the beginning, in January, 1918, to November 15, 1920, were $1025 million, in return for which France furnished 5712 million francs, or at the rate of about 5.55 francs to the dollar, the "pegged" rate.[30]

(e) *The "Pegging" of Foreign Exchange*—

French foreign exchange fell fairly continuously until September, 1915, when it declined to about 80 per cent of parity. After that date it was maintained fairly stable, fluctuating about 2 per cent. The "pegging" of French exchange was made possible by the support of Great Britain, which extended credit liberally to her ally. In April, 1917, upon the entry of the United States into the war, French exchange rose, and was maintained thereafter at about 90 per cent of parity. Arbitrage reduced the discount on the franc in neutral markets. French exchange subsequently rose and at the time of the release of the "peg" it was at about 95 per cent of parity. Its subsequent decline down to about 33 per cent of parity is discussed in the section on exchange in the United States.

The bills of exchange handled by the Bank of France exceeded fr. 6,000 million in 1917 and fr. 5,000 million in 1918. They were chiefly sterling and dollar bills, supplied by the French Treasury, to stabilize francs in London and New York. In 1919 the bills supplied by the Bank of France were about fr. 2,200 million, of which almost fr. 1,500 million were supplied by the Bank in the first three months of the year. The remaining fr. 700 million, resulted from the sale of foreign securities and from advances by the United States Treasury.[31]

[30] Report of the Secretary of the Treasury for the year 1920, pp. 54-69.
[31] Report of the Bank of France for the year 1919. Also report of Consul General A. M. Thackara, for 1919, *ibid.*

CHAPTER XII

GERMAN FOREIGN EXCHANGE[1]

The quotations of German exchange before, during and after the war have been given above. The period after the war may be summarized. Immediately following the signing of the Treaty of Peace, there was a sensational collapse of German exchange. The high monthly demand rate in July, 1919, was 8.00 cents and in January, 1920, it was 1.01 cents per mark. The inflation of German currency proceeded at a far slower rate than the decline of mark exchange. Internal depreciation was less than external depreciation. As a result prices of German goods became very low to foreign buyers and there was a tremendous wave of foreign purchasing of German goods and securities. The so-called "auction sale of Germany, or the "great German clearance sale" denuded Germany of goods. At the same time the removal of the Allied blockade and of trade restrictions and the unguarded customs frontier in the west led to the excessive importation of luxuries, which ran into billions of marks. During this period "every Dutchman or Dane leaving Germany possessed a Zeiss field glass or camera bought for a few guilders or crowns and Germans spent their last mark on American chocolate or cigarettes."

The second period was characterized by a foreign demand for German goods and a stimulus to German industry. Although the cost in marks of imported raw material was high the other items in the cost of production, such as wages, rent and overhead, were paid in the currency of low value. To prevent any further "clearance" sale export premiums were to be added to domestic prices. When they were ready to be put into effect, exchange improved and the so-called "catastrophe boom" was followed by an "improvement depression" when the rising rates of German exchange reduced foreign buying.

[1] During the war publication of quotations of foreign securities or currencies was prohibited by laws of Feb. 25 and Mar. 7, 1915. See Reichsgesetzblatt, 1915, pp. 111, 112, 154. After the war complete quotations were given for the war period. See the Deutscher Reichsanzeiger or the Vierteljahreshefte zur Statistik for 1920.

During the third period exports declined, industry was less active and unemployment increased. Prices in Germany rose toward the world level, not as a result of export premiums, but as a result of natural economic forces.

The three periods after the armistice were periods of violent price changes. In the first domestic prices were low and exchange was low. In the second period domestic prices were high and exchange was low. In the third period domestic prices were high and exchange was high. Although the cost of living was high, in marks, it was low in dollars or pounds in the first period, but less so in the third period.

As this book went to press, in October, 1921, marks declined to a new low level of ¢.80 and gave a new impetus to foreign purchases.

A. Causes of Fluctuation

i. *Trade Causes*

The chief trade cause of the decline in exchange was an excess of imports in part due to illegal imports through the so-called "hole in the west," the unguarded frontier across which goods were smuggled. A large supply of bills or marks sold by foreigners was thus created. Finally, the loss of the invisible credits, arising from interest on investments and shipping services accounted in part for the decline.

(a) *Excess of Merchandise Imports*—

For five years, from the outbreak of the war to the signing of the peace, Germany was in restricted intercourse with the sources of supply of raw materials. The country was denuded of goods essential for life. As a result of lifting the blockade in the second half of 1919, the underfed and ill-clothed population imported tremendous quantities of goods. The balance of trade became unfavorable to an extent without precedent in German history. Furthermore, as a result of the occupation of the western areas of Germany by the Allied armies, the effective control of imports was impossible and vast quantities of luxury goods, cigarettes, chocolates, perfumes and jewelry poured into the country. These illegal imports were due in part to the desire to taste the joys of pre-war days once more and in part to the rapid inflation of the currency, whose purchasing power diminished so fast that the

population tried to convert it into anything at all that decreased in value less rapidly.

On the other hand, exports did not keep pace with imports. There was a lack of raw material and of coal. Production in the early part of 1919 had declined and even the increasing foreign purchase of German goods on hand such as art works, securities and property in general did not balance the imports owing to the continued depreciation of the mark. The extent of the illegal importations through the "hole in the west" was enormous. At one coup the German government confiscated mk. 11 million of merchandise which was imported without a license. The closing of the "hole in the west" in part accounted for a rise in the German exchange in the spring of 1920.[2]

(b) *Loss of Invisible Credits*—

The German pre-war investments in non-European countries in 1905 were mk. 16,000 million acccording to the Reichs-Marine-Amt.[3] In the 10 years from 1905 to 1914, the record of the compulsory fee stamp for all foreign securities imported into Germany indicated that an additional mk. 4700 million were purchased. The German investments in Europe amounted to mk. 15,600 million, distributed as follows:

	Million marks
Austria-Hungary and Bulgaria	4900
Russia	4300
European neutrals	6400

Adding the investments in Europe and elsewhere the total pre-war investments would amount to mk. 35,000 million, equivalent to about $9,000 million although other estimates show lower totals.[4]

Year	Billion marks	Authority
1914	25	Ballod and Pistorius
1913	20	Helfferich
1905	16	Von Halle
1893	12	Koch
1892	10	Schmoller

[2] Verwaltungsbericht der Reichsbank, 1919.
Report of Consul Frederick Simpich at Berlin in Commerce Reports, July 13, 1920.
[3] J. Riesser, The Great German Banks and Their Concentration, pp. 545-546. National Monetary Commission Report.
Coöperation in the American Export Trade, Report of the Federal Trade Commission, part 1, p. 72.
[4] Keynes, J. M., Economic Consequences of the Peace, p. 175, Am. Ed.

The pre-war average excess of imports of Germany amounted to about mk. 1600 million. On the other hand shipping earnings amounted to about mk. 1000 to 1500 million. Interest on investments amounted to about mk. 1700 million.

Adding the shipping earnings and the interest on foreign investments, the annual invisible credits of Germany amounted to about mk. 3200 million, leaving a net credit balance of about mk. 1600 million. It was this invisible credit which made it possible for Germany to import gold before the war, to increase her foreign investments at the rate of mk. 500 million to mk. 1000 million per annum,[5] and to maintain the mark at parity on all markets.

As a result of the war, Germany lost her mercantile marine and with it the rich revenue that it earned before the war. German property abroad was sequestered by the enemy and income therefrom ceased. German insurance companies, branch banks and branch trading companies abroad were liquidated. Therefore Germany was no longer able to pay for an excess of imports of merchandise as before the war.

ii. *Financial Causes*

(a) *Sales of Marks by Foreigners*—

As a result of the military collapse of Germany, marks were sold by foreigners in neutral countries, in Alsace-Lorraine, and in the other Central Powers. Dr. Calmon, Assistant Director of the Darmstadter Bank, estimated that the foreign holdings in marks were mk. 20,000 to mk. 25,000 million at the end of 1919. This conforms to the estimate of Ludwig Bendix, Chief of the Division of Foreign Exchange of the Ministry of Economics. Other estimates indicated a higher figure. The Frankfurter Zeitung estimates that mk. 3500 million went to Switzerland from the signing of the armistice to the middle of 1919. The total marks in Holland were estimated at mk. 4000 to mk. 5000 million.

As marks depreciated, holders in neutral Europe sold to avoid the wasting of their assets. The rapid depreciation of the mark completely demoralized those merchants of the neutral countries who held marks obtained at or near parity.[6] Furthermore, as a

[5] Hobson, C. K., The Export of Capital, p. 161. Keynes, J. M., Economic Consequences of the Peace, p. 175.

[6] Report of Consul Frederick Simpich, Berlin, Commerce Reports, Mar., 19, 1920.

result of the differences in the rate of exchange which prevailed on the east and west bank of the Rhine in 1919, marks were bought by persons on the east bank of the Rhine at a lower rate and sold on the west bank, where they were stabilized, at a higher rate.[7] Again, large offers of marks were made in the neutral countries by holders in Alsace-Lorraine shortly after the armistice was signed. Upon the military collapse of Germany the allies of Germany, who had large holdings of marks, dumped them on the market and initiated the decline.[8]

(b) *Maturing Loans*—

The mark depreciated not only on account of the trade balance. During the war Germany opened short-term credits in the neutral countries of Europe and was unable to meet the loans maturing after the war. Furthermore, the extensive purchase of German currency and of German securities, long-term and short-term, by foreign investors, created a large floating supply of marks which were thrown on the market in panic when German exchange declined rapidly and for profit when exchange began to improve.

(c) *Flight of Capital*—

Furthermore, the heavy tax program which Germany undertook for the purpose of meeting its budget created a panic among capitalists, and as a result there was a "flight of capital" from Germany, which took the form of an exportation of currency, of securities, and of precious goods at sacrifice prices, for the purpose of obtaining non-German currency. This eagerness to sell marks naturally depressed the German rate of exchange on all markets.[9] The flight of capital was undoubtedly the important factor in accounting for the decline of the mark. In fact, the surplus of imports, big as it was, was a relatively insignificant cause. The smuggling abroad of marks and securities was on such an enormous scale that early in 1920 when German exports were rapidly increasing, the exchange rate of the mark was continually falling.

Another cause of the decline was a premature and unwise announcement from Weimar that on July 23, 1919, "all current German paper money would be replaced by bonds or emergency

[7] Frankfurter Zeitung, Dec. 27, 1918.
[8] Welthandel, Dec. 13, 1918.
[9] Reichsbank Report for 1919. Welthandel, Dec. 13, 1918, Feb. 28, 1919.

paper in order to determine how much property is available in Germany for inevitable taxation." Under this decree old money would have been declared invalid, stocks and bonds would have been subjected to stamping, and all unstamped papers would have lost their value. This announcement led to a panicky flight of capital and raised such a storm of protest that the plan had to be abandoned. Upon the announcement at Weimar, marks dropped from 23 florins to 16 florins in Amsterdam. However, its abandonment did not restore confidence or halt the exodus of all forms of wealth from Germany.[10]

New methods for the escape of capital were devised. Neutral newspapers printed advertisements offering help to Germans who wished to save their fortunes by smuggling currency or securities.[11] Again, a popular and legal method of taking capital abroad was the establishment by German industries of branches in neutral countries. Raw materials were imported into Germany and the manufactured goods exported and prices calculated on such a basis that the bulk of the profit fell to the foreign agency. Although German labor was afforded employment, the amount of German taxable income was reduced. Again, exporters would hold in banks abroad the foreign currency received in payment, thus providing no means for the German importer to pay for goods.

Upon the abandonment of the plan for the collecting and stamping of currency and securities, the German government devised a check on the flight of capital by requiring that interest coupons and dividends be collectible only through banks and bankers and that tax authorities have access to bank records. These regulations included securities held not by the banks but in private vaults or abroad. Foreigners residing in Germany and holding securities had to prove that no German interests were involved.

International coöperation would cover the flight of capital, not only from Germany, but from other countries which proposed heavy taxation.

iii. *Monetary Causes*

Probably the most potent cause of the depreciation of German exchange was the inflation of the currency. The enormous increase

[10] Article in the Algemeen Handelsblad, Amsterdam, Nov. 2, 1919, printed in Commerce Reports, Nov. 29, 1919.

[11] Copenhagen correspondence, London Economist, Oct. 11, 1919.

in the circulation of Reichsbank notes and of loan bureau notes caused the depreciation of the paper mark both at home and abroad. On the other hand, the surrender of gold by Germany in order to pay for food, aggravated the discount on paper, for it postponed the ultimate redemption of paper. The relevant facts are given fully in the section on German currency and credit.

iv. *Fiscal Causes*

The increase of the currency was due to the inability to balance the budget. The increase of public expenditures resulted in deficits which the state covered by borrowing notes from the Reichsbank against short-term bills. The huge expenses imposed upon Germany by the terms of the armistice increased the deficit and therefore the note circulation, and thus in turn further depreciated the mark. The very drastic tax legislation passed by Germany helped to balance the budget and thus was a factor in preventing a worse depreciation of the mark.

When the budget is made to balance, when the Reichsbank holdings of treasury bills are decreased, thus making possible a deflation of the note circulation, the paper mark should rise, because of the increasing likelihood of redemption in gold.

v. *Political Conditions*

(a) *Military Factors*—

In addition to the direct influences of imports and exports, the flight of capital, the increase in paper money and the deficit in the budget, there were other important determinants of fluctuations in the rates of exchange. The rise of the mark in the neutral countries at the end of 1916, when President Wilson attempted to secure "peace without victory," and at the end of 1917, when Lord Lansdowne's statement was taken as an augury of peace, showed the sensitiveness of the exchange rate to political conditions. Similarly, the appeal for an armistice by the Central Powers in October, 1918, improved the rate for marks in the neutral countries. In spite of the obvious defeat of the Central Powers, peace was expected to improve the fundamental conditions, and thus to correct the depreciation of the mark. Bulgaria's abandonment of her allies was expected to depress the mark. However, because it was regarded as a forerunner of peace, mark rates rose in Switzer-

land from 65.25 the day before the defection to 66.50 the day following. On October 5, 1918, when the Imperial Chancellor made his appeal for peace, the mark rose to 69.00 and a week later to 77.50, the high rate in May, 1918 and December, 1917.

(b) *Internal Disorders*—

On the other hand, the internal disorders, the Spartacide revolt, and even the brief Kapp *coup d'état* depressed the mark. The mark was very sensitive to internal disorders after the armistice. During those trying days when a stable government was being established, the mark rose and fell with the prospect of success or failure of the new regime. The release of the control of foreign exchange, the abrogation of the *Devisenordnung,* and the restoration of free trading in foreign exchange, caused a collapse in September, 1919. The rescission of regulations on import and export trade acted like the opening of a sluice, and there was a rush of imports as well as large purchases of foreign currency.

(c) *International Restrictions*—

International political conditions of course had a profound effect on the mark. The announcement of the terms of the armistice depressed the mark, for the surrender of the German mercantile marine and the indemnity clauses indicated that there would be no annual invisible credit to offset an excess of imports. The splitting off of the provinces on the French and Polish borders, the destruction of Germany's economic unity, the isolation of European and Asiatic Russia, the general uncertainty, which was prolonged over two years after the armistice was signed, the failure promptly to fix the amount of the indemnity and to define Germany's obligations, were important influences in demoralizing German exchange. The failure of the Allies to make provision for the restoration of the economic life of Germany to a normal basis, and the lack of raw materials and of credit, were additional factors in depressing the mark.[12]

(d) *International Coöperation*—

On the other hand, the extension of loans to Germany for raw materials, the development of financial devices, such as refining

[12] Wirtschafts-Zeitung, Mar. 1, 1920. Bank Archiv, Feb., 1920. Report of Consul Frederick Simpich, Berlin, printed in Commerce Reports, Mar. 19, 1920.

credits and shipping raw materials under a trustee arrangement, and the provision of other means of restoring Germany's trade were reflected in a rise of the mark on the several exchanges.[13]

B. The Effects of the Decline

The effects of the decline were commercial and financial. Imports were checked and exports were stimulated. Foreigners invested in German securities and bought up German industries. The mark quotation for international securities rose as the exchange rate declined.

i. *The Effects on Prices*

(a) *The Gap between German and World Prices*—

1. The facts—As a result of the extraordinary decline of exchange, the purchasing power of foreign currencies in Germany increased. As exchange declined toward the end of 1919 Baron von Richthofen declared in the National Assembly that "upon the present basis of exchange, Germany is the cheapest country in the world to live in." In September, 1919, when the mark was at about 25 per cent of gold parity in Sweden, Professor Knut Wicksell calculated that as the Swedish crown had only 40 per cent of its pre-war purchasing power, the German mark had only 10 per cent of its pre-war purchasing power in Sweden. But prices in Germany had risen only about four or five-fold.[14] The same disparity in purchasing power of British and German currencies was observed in England. The phenomenon may be anomalous, but it is easily explained. The fall of the mark, due chiefly to the flight of capital, proceeded so rapidly that domestic prices could not rise proportionately. Of course, the price of imported goods rose *pari passu* with the fall of the mark. Furthermore, the rise of prices had been legally checked during the war, and Germany was practically an isolated industrial community. Upon the advent of peace and the reëstablishment of international trade connections, the disparity between German and world prices became evident. Foreigners hastened to buy in Germany and thus bid prices up and took goods away from the domestic consumer. On the other hand the German consumer had to pay very high in marks for imported products which were competitive with German goods.

[13] Berlin letter of Mar. 9, 1920 of correspondent of London Economist.

[14] London Economist, Oct. 11, and Dec. 5, 1919.

Although paper was scarce in Germany and abundant in Sweden, typewriting paper, which sold in Stockholm at 16 crowns per thousand sheets, sold in Berlin for mk. 18, equivalent to 2½ crowns. The same held true for other supplies. A razor whose pre-war price was mk. 8 sold for mk. 47.50, but with prices calculated in gold the razor was cheaper than in 1914. Even though goods were scarce, the gold price in Germany was cheaper than that abroad.

2. THE EFFECTS—*a. Rise in German prices*—As a result of the anomalous cheapness of German commodities prices gradually rose. Between August, 1914, and January 1, 1919, the price of coal increased by mk. 11.80 per ton, but in the first six months of 1919 the increase was mk. 40.60. Similar large increases were made in the price of other commodities. The price per ton of structural steel, which between May, 1914, and December, 1918, rose from mk. 110 to mk. 220 only, was increased to mk. 520 by May, 1919, and to mk. 715 by September, 1919, although as much as mk. 1000 was paid if prompt delivery was assured. The cycle was, first an increase in the price of imported goods, then an increase in the cost of living, then an increase in wages, and in overhead, and finally a rise in the price of domestic products. When the mark declined very rapidly, so that the price of German goods fell further below the world level of prices, German exporters added an export premium on their wares. However, the subsequent rise in prices made such an artificial step unnecessary.

b. Inability to deliver goods for export—As a result of the low level of prices in Germany, her industries were flooded with orders. In some instances special freight facilities had to be provided to the neighboring neutral countries. However, this activity was short lived. Germany lacked goods when the armistice was signed, and the artificial stimulus given to German exports by the rapid decline of the mark depleted the stocks and cleared the warehouses of Germany. Foreign merchants who had ordered supplies from Germany did not receive the goods and had to pay the world price for them in other markets.[15] The gap between the price levels in Germany and elsewhere hastened the exhaustion of German supplies.

[15] London Economist, Oct. 11, 1919.

c. *"Germany's clearance sale"*—The disparity between prices in Germany and elsewhere attracted foreigners, who flocked to Germany to live, thus to increase the purchasing power of their incomes. Furthermore, purchasing agents thronged to Germany to attend *"Deutschland's Ausverkauf,"* the auction sale of Germany, as the *Vossiche Zeitung* termed it. Even though Germany was practically bare of leather and copper, the low value of the mark made it profitable to ship these much needed raw materials out of Germany. When owing to lack of raw materials it was no longer possible to have goods made to order in Germany, foreigners would buy up the stocks on hand. Art works particularly were taken in great quantities by foreigners, in spite of the increased prices charged by dealers. Not only commodities but securities and industries were purchased by foreigners. The French bought shares in German iron and steel works, or the plants themselves, as well as hotels and other real estate in the important cities, and famous resorts.[16]

(b) *Price Changes*—

1. THE FALL IN EXCHANGE AND THE RISE IN PRICES—As a result of the competitive demand of all Europe for German commodities, prices rose sharply. Within a few months Germany underwent a price revolution which in the rest of the world took five years. All the greater is the wonder that there was no social upheaval during the process. Import prices rose and domestic prices followed suit. Within a fraction of a year the price of wood pulp and paper imported from Scandinavia, for example, increased several fold and the price of the domestic German supply rose correspondingly.[17] A few typical prices are given herewith:

Commodity	Dec., 1918. Marks	Dec., 1919. Marks	Ratio, 1919 to 1918
Tin, per kilo	6.70	65.00	9.7
Nickel, per kilo	12.00	40.00	3.3
Pig iron, per kilo	0.60	7.00	11.7
Coal, per ton	44.00	152.00	3.4
Hematite iron, per ton	315.00	2227.00	7.1
Cast iron, per ton	249.00	1636.00	6.6

[16] London Economist, Oct. 11, 1919, Nov. 29, 1919 and Dec. 6, 1919. Also Affars Varlden, Stockholm, Sweden, Oct. 22, 1919, printed in Commerce Reports, Dec. 12, 1919.

[17] London Economist, Feb. 14, 1920.

The commodities which rose most were hides, leather, textiles, the non-ferrous metals, and foreign goods. The finished goods rose less in price because the cost of production did not rise in the same proportion as the cost of the imported raw material.

2. THE RISE IN EXCHANGE AND THE FALL IN PRICES—Until February, 1920, the mark fell on the foreign exchanges, but rose thereafter for several months. During the latter period prices in marks of imported goods fell. Just as import prices were most sensitive to the fall in exchange, so they were as responsive to the rise in exchange. The price of cotton and the exchange rates are given herewith:[18]

Date	Exchange rates. Marks per dollar	Raw cotton in Bremen. Marks per kilo	Cotton yarn in Stuttgart. Marks per kilo	Cotton cloth. Marks per meter
1920:				
March 3..........	99.65	86	150	
March 17........	92.00	80	150	18.00
April 7...........	63.40	70	140	17.50
April 21..........	60.02	73	125	17.00
May 5...........	54.27	62	105	15.50

The dollar declined or the mark rose about 45 per cent. The price of imported raw cotton declined 25 per cent, but the price of the finished cloth declined 18 per cent.

The correspondence between the depreciation of German exchange and the rise in prices and the correspondence between the improvement of German exchange and the fall in prices are shown in the table on page 461.[19]

The close correspondence between exchange rates and the price of commodities made trading in imported materials a gamble in exchange, and a menace to industry. As German prices to the foreigner rose with the appreciation of the mark, foreign orders in Germany fell off and industrial stagnation set in. Foreign buyers complained that German prices were exorbitant and were

[18] From the Berliner Boersen Zeitung, May 12, 1920, Commerce Reports, July 20, 1920.
[19] Deutsche Allgemeine Zeitung, May 19, 1920, Commerce Reports, July 20, 1920.

above the world price level. At such a time American sewing machines undersold domestic machines in the German market, and German chemicals were no longer able to compete with American chemicals in price.[20]

Date	German Exchange Rates		German Metal Prices			
	In Netherland. Marks per florin	In Switzerland. Marks per franc	Copper. Marks per 100 kilos	Lead. Marks per 100 kilos	Zinc. Marks per 100 kilos	Aluminum Marks per 100 kilos
1920:						
Jan. 1...	18.56	8.74	2436	900	880	3250
Mar. 15...	36.81	16.18	4625	1725	1450	6200
Mar. 31...	26.97	12.78	3286	1150	1100	4800
April 30...	20.82	10.21	2591	720	725	3800
May 11...	17.88	8.66	2281	595	675	3300

(c) *Lower Cost of Production*—

As prices rose with the depreciation of the mark, workmen struck for higher wages to compensate for the increase in the cost of living. Nevertheless, wages in Germany were far lower than in other countries. For example, in the Solingen steel industry Dr. Bernhard Schulze estimated that a workman who would earn $4000 a year in an American plant earned mk. 10,000 in Germany, equivalent to about $100 at the rate of exchange in March, 1920. The overhead expense was also lower in Germany. Before the war rent in Germany was 25 per cent of that in the United States. During the war rents rose less, owing to government regulation, and after the fall of the mark to 4 per cent of its pre-war value in February, 1920, rents in Germany were about 1 per cent of the rents in the United States. German coal cost the equivalent of $1.00 per ton and German railroad freight rates averaged about one-seventieth of American rates. In February, 1920 German pig iron cost the equivalent of $18 per ton. As the mark appreciated on the foreign exchanges, wages were not

[20] Frankfurter Zeitung, Apr. 3, 1920. Berlin correspondence London Economist, June 5, 1920. Berlin cable to the Department of Commerce, Commerce Reports, June 1, 1920.

lowered, because the cost of living did not fall as rapidly as the cost of imported raw materials.

Similar evidence of the low cost of production in Germany is afforded by a comparison of wages in Sweden and in Germany. The average daily Swedish wage was 16 crowns in January, 1921, and at the rate of exchange then current this was equivalent to mk. 280. The highest German wage at the time was mk. 60 per day, or the equivalent of 83 cents in American currency. The scale of wages of the Association of Non-Manual Employees in the Westphalian coal and metal industries was as follows:

Wage earners	Marks per month	Equivalent in dollars
Junior clerks	750	10
Senior clerks	2200	31
Junior chemists	1800	25
Senior chemists	4000	55

As a result of the lower cost of production in Germany, Swedish industries were unable to compete with those German industries which utilized domestic raw materials. The price per ton of Swedish paper was kr. 1100 and the price of German paper was mk. 8000 or equivalent to kr. 625. However, the cost of production of German paper was only mk. 2500 per ton and the additional mk. 5500 represented the export premium charged to foreigners under the law of December 20, 1919. The only commodities which in Germany cost as much as in Sweden and Holland were the imported raw materials for which Germany had to pay at the world price level, such as cotton, copper and rubber. However, upon the manufacture of these raw materials into finished products, the difference in price level reappeared because of low wages, rent and overhead in Germany. As a result of this discrepancy between the cost of production in Germany and in other countries, the index number of prices moved upward in Germany during the same period in which the price level of the rest of the world was declining. In Germany there was still a seller's market while in the rest of the world there was a buyer's market.[21]

[21] Berlin and Frankfurt correspondence, Journal of Commerce, Jan. 26, 1921.

(d) *Equalization of German and World Prices*—

Although ultimately the German price level approximated the world price level, there was a period when the discrepancy was a source of difficulty. Realizing the relative cheapness of German goods to the foreigner, German manufacturers, with the encouragement of the government, imposed export premiums on sales to foreigners. To some extent this action was justified, because contracts with merchants in the neighboring neutral countries were made on the basis of pre-war prices, or of prices fixed during the war.[22] Export premiums were added so that the price to the foreigner was close to the world level, yet competitive with non-German manufacturers. The premiums were highest on goods made of German raw materials, such as glass, porcelain and toys. But on goods made of foreign raw materials there were either lower premiums or none at all. As a result of the higher price paid by the foreigner, the domestic consumer was either neglected or else German manufacturers attempted to raise the German price level to the world price level by adding the export premium to domestic prices. Otherwise, the producers stated they would be compelled to serve the foreign market exclusively.

There was some justification for this policy in the case of industries that had to purchase foreign raw materials, such as Swedish iron ores. It would have been unprofitable to the producer to pay high import prices in marks on raw materials unless producers were assured of correspondingly high export prices on the finished product. This situation was ultimately relieved. The purchasers of foreign iron ores had to furnish foreign currency in payment. They therefore asked their domestic customers, who made finished steel products, either for foreign currency, or else the equivalent in German marks. This compelled the manufacturers of finished products to increase prices to the domestic consumer. During the period of transition there was an unsettlement of industry and a hardship was worked upon both the producer and the consumer.

ii. *Commercial Effects*

(a) *Stimulation of Exports*—

The figures of German trade were published monthly from January, 1919, to May, 1920. The returns during this period

[22] London Economist, Feb. 28, 1920.

showed at first a huge increase in imports because of the dire need for goods in Germany after the lifting of the blockade. However, after October, 1919, the excess of imports began to decline, and in April, 1920, an excess of exports appeared, which was doubled in the following month. For the rest of the year 1920 figures are not available.[23]

FOREIGN TRADE OF GERMANY[24]
(in million marks)

Date	Imports	Exports	Excess of imports	Ratio of exports to imports. Per cent
1919:				
January	397	161	236	40.6
February	408	195	213	47.7
March	440	292	148	66.4
April	626	270	356	43.1
May	1,468	251	1,217	17.1
June	2,688	406	2,282	15.1
July	3,538	570	2,968	16.1
August	3,817	735	3,082	19.3
September	4,191	790	3,401	18.9
October	5,179	1,089	4,090	21.0
November	4,446	1,284	3,162	28.9
December	5,178	4,014	1,164	77.5
Total, 1919	32,376	10,057	22,319	31.0
1920:				
January	6,560	3,219	3,341	49.0
February	5,932	4,262	1,670	71.8
March	5,683	4,216	1,467	74.0
April	4,768	5,344	576*	112.0
May	5,537	6,647	1,110*	120.0

* Excess of exports.

The figures for exports include deliveries for reparation in unstated amounts, and it is therefore impossible to determine what proportion of the exports gave rise to a supply of foreign bills.

[23] See Frankfurter Zeitung, Evening Edition, Sept. 27, 1920.

[24] Economiste Europeen, Oct. 1, 1920. London Economist, Oct. 9, 1920. Commerce Reports, Nov. 13, 1920 and Dec. 15, 1920. The accuracy of these statistics has been questioned.

It is worthy of note that the exports rose to a level of about mk. 5000 per month and remained near that figure from September, 1919, to May, 1920. However, in view of the fact that the exchange rates declined from about 4 cents in September, 1919, to less than 2 cents in March, 1920, the quantities imported must have declined. On the other hand, along with the continuous depreciation of the mark during 1919 and through the spring of 1920, exports increased continuously, and probably caused the subsequent appreciation of German exchange.

The decline of mark exchange stimulated exports. For example, the automobile industry was unable to fill foreign orders. In spite of the fact that the steel industry in Solingen raised its prices by 300 to 400 per cent orders came pouring in from the United States, South America and even the Dutch East Indies. German manufacturers were able to underbid other foreign competitors during the period of the decline of the mark. The stimulation of exports ceased when these two price levels were equalized. When the mark appreciated in the spring of 1920 Germany's advantage as an exporter diminished. Foreign orders for German goods were canceled. Ordinarily an advance of German exchange rates would be accompanied by a fall in German prices, but no such fall took place in the spring of 1920, because the price level in Germany was still under the world level. When the mark depreciated German manufacturers either increased prices or added an export premium, or else refused to ship at old prices. When marks rose, foreigners canceled orders.

(b) *Foreign Competition*—

1. In the home markets—The effect of declining mark exchange was to give the German manufacturer an advantage over his foreign competitor. In the neutral countries with which Germany maintained commercial intercourse during the war, this effect was very evident. As the mark declined during the war German manufacturers did not raise prices because of the loss of the world market and the decline in foreign demand for German products. A few examples will illustrate this point. The price in Sweden for a certain type of German electric lamp was 57 öre before the war and 38 öre in June, 1917. A brand of German hooks cost 2.42 kroner per gross before the war and 1.61 kroner in June, 1917. Similar reductions in Swedish prices of German

goods applied to pianos, boilers and a long list of commodities.[25] As a result of the exchange bounty to German manufacturers the *Sveriges Industriforbund,* the association of Swedish manufacturers, petitioned the Treasury to increase the import duties to compensate for the decline in German exchange.[26] This measure was identical with the request of the wool producers of the United States before the Ways and Means Committee of the House in the autumn of 1920.

This experience was repeated in several countries and at subsequent periods. In Switzerland, Germany was able to deliver goods at far lower prices than a similar grade of the domestic product cost in Switzerland. For example—

PRICES IN SWITZERLAND

Commodity	Of German goods	Of Swiss goods
Paper, francs per pound	20	70
Chairs, francs each	13	40
Furniture, francs per set	450	1600

The effect on Swiss industry was feared and as in Sweden various manufacturers proposed an embargo on German products. The iron and steel manufactures in Switzerland proposed that an arbitrary rate of exchange between Switzerland and other countries be fixed in order to protect Swiss manufacturers during the period of falling foreign exchange.[27] The experience in France was similar. As a result of the decline of the Austrian krone, Austrian bentwood chairs sold in France at fr. 5 each, whereas French chairs sold at fr. 25.[28]

The French government placed an order with German equipment companies for 30,000 railway trucks, for use on the French state railroads. In reply to a protest by French manufacturers, the Minister of Public Works stated that the German bid represented a saving of fr. 15,000 per truck compared with French and foreign offers.[29]

2. IN FOREIGN MARKETS—Because of the decline of mark

[25] London Economist, Dec. 22, 1917.
[26] Deutscher Aussenhandel, June 20, 1917.
[27] Zurich dispatch, New York Times, Oct. 20, 1919.
[28] London Economist, July 12, 1919.
[29] London cable Journal of Commerce, Dec. 1, and 15, 1920.

exchange the Germans were able to underbid the manufacturers of other countries not only on domestic orders but also on foreign orders. For example, German and British firms competed on a contract for locomotives for the British Dominions. The Germans took the order at £400,000; the lowest British offer was £680,000.

A contract for structural steel in Holland was received by a German firm on terms far below those of British competitors. The German price for the fabricated steel was lower than the quotation for raw material from the British rolling mills. During the period when the mark declined,[30] German producers were able to obtain contracts in competition with those of other countries whose exchange rates were higher.

German equipment companies bid successfully against Belgian, British, French, Swiss, and American competitors for an order for locomotives on the Spanish railroads.[31]

(c) *Barter*—

As a result of the unsettling effect on trade of fluctuations in mark exchange, Germany and her neighbors resorted to barter in various forms. The impracticability of making allowances for variations in German exchange made it difficult for German importers to buy essentials. The shortage of goods in Germany was due in part to the fact that trade in imported commodities had become a gamble in exchange. To avoid these difficulties methods of bartering were utilized.[32] The scope of such trade of course was limited.

The fluctuations of both German and French exchange complicated the questions of reparations, and the rehabilitation of northern France. To avoid the difficulties, a commission of German engineers visited northern France for the purpose of reporting on a scheme for rebuilding the devastated areas with German materials, German labor, and under German supervision. The proposal was that instead of paying France for the work in francs Germany should do the rebuilding on the basis of the German mark.[33]

[30] London Times, June 17, 1919. Journal of Commerce, July 8, 1919.
[31] Madrid dispatch, Journal of Commerce, Jan. 28, 1921.
[32] Report of Consul General G. E. Anderson, Rotterdam. Commerce Reports, Sept. 29, 1920.
[33] London Economist, Aug. 30, 1919.

A new form of barter was developed after the war. Germany would receive raw materials under a trust agreement and the foreign exporters would retain title to the goods. German manufacturers would work up imported raw materials and return to the foreign shipper stipulated amounts of finished goods in payment. The Deutsche Waren-Treuhand Aktiengesellschaft was a financial institution organized to aid in effecting these so-called refining credits.

iii. *Financial Effects*

The depreciation of mark exchange had several financial effects. The price of international securities rose as the mark fell. Furthermore, foreigners bought German securities and industries. By an irony of fate the country which before the war developed economic penetration to a high degree, became the victim after the war of the same process. The decline of the mark furthermore made it difficult to pay interest on German bonds issued in foreign monies. While the mark depreciated very rapidly and continuously German capital fled the country, primarily because holders wanted to buy any goods or values which were likely to depreciate less rapidly than the mark.

(a) *The Rise in the Price of Securities*—

The rise in the price of foreign securities listed on the German stock exchange resulted from the depreciation of the mark. As the rate of exchange improved these prices fell. The so-called exchange or *valuta* securities were very sensitive to the fluctuations of exchange rates, because the underlying assets were in foreign currency. For example, the shares of Steua Romana, a Rumanian oil company, rose from 337 to 865 from August 1, 1919, to October 13, 1919. The shares of the Pomona Company rose from 1050 to 3350 during the month of September, 1919, and by December 12, 1919, they reached a price of 7000. These prices should be compared with the exchange rates of that period. The monthly high demand rate for marks in New York was 6.25 cents in September, 1919, and 2.60 cents in December, 1919.[34]

[34] Deutsche Allgemeine Zeitung, Jan. 31, 1920. Koelnische Zeitung, June 4, 1919. Berlin correspondence, Journal of Commerce, Dec. 5, 1919, Jan. 21, 1920.

The fluctuations of the mark affected not only international securities, or securities issued in foreign currency, but also native German securities, which were issued in marks. Foreigners purchased heavily of these securities, when the mark depreciated. The following list shows the course for five bonds and 15 stocks from the resumption of the publication of official quotations on September 1, 1919, by intervals up to May 8, 1920. The table shows very clearly that as the mark depreciated, from September 1, 1919, to March 1, 1920, the price of securities rose proportionately. German exchange improved slightly from March 1, 1920, to April 13, 1920, and securities prices declined. From April 13, 1920 to April 20, 1920, German exchange depreciated again and securities prices rose. From April 20, 1920, to May 8, 1920, German marks improved again and securities prices declined.

RELATIVE FLUCTUATIONS OF EXCHANGE RATES AND SECURITIES PRICES [26]

Date	Marks per florin*	Total price† 15 stocks. Marks	Total price‡ 5 bonds. Marks	Total price of stocks and bonds. Marks
1919:				
September 1	7.82	3,581	511	4,093
1920:				
January 2	18.80	7,015	630	7,645
March 1	36.77	12,109	1107	13,216
April 13	20.00	7,946	850	8,795
April 20	22.75	9,076	840	9,916
May 8	18.80	8,164	717	8,881

* 1 mark equals 23.82¢ at parity. 1 florin equals 40.2¢ at parity.

† The stocks include the Deutscher Bank, the Phoenix Smelting, Harpener Iron, Badische Anilin, Deutsch-Asiatische Bank, Santung's A E. G. (General Electric Co.) and H. A. P. A-G (Hamburg-American Line).

‡ The bonds include the 5 per cent War Loan, 3 per cent Imperial Loan, 4 per cent Prussian Loan, 4 per cent Frankfurter Loan and 5 per cent Mexican Gold Loan.

(b) *Increase in Capital Issues*—

The depreciation of the mark upset the relation between the capitalization of corporations and the current prices paid for raw materials. It was a common experience that an order for raw materials for a few months' operation would amount to more than

[26] Frankfurter Zeitung, May 10, 1920. Frankfurt correspondence, Journal of Commerce, Dec. 15, 1920.

the total capitalization of a company. Again, many companies that wished to extend their plants would find that the capital needed for an addition was larger than the total existing capitalization. To meet the many difficulties that arose because of the differences in value between the gold mark and the paper mark, industrial companies increased their capital, declared stock dividends, and by other means attempted to equalize the old and new values of the mark.

CAPITAL ISSUES BEFORE, DURING AND AFTER THE WAR [36]

Year	Million marks
1913	317
1914	322
1915	58
1916	113
1920	11,514
Fourth quarter, 1919...	1,898
Second quarter, 1920...	2,768
Fourth quarter, 1920...	4,242

The depreciation of the mark to about one-twentieth of its pre-war value resulted in an increase of capital issues of about 35 times.

(c) *Investments by Foreigners, Economic Penetration and the Remedy*—

As a result of the decline of the mark, large sums of German treasury bills were bought by foreign investors, who furnished exchange for German interest-bearing securities of all kinds.[37] In addition to buying securities, foreigners bought all sorts of property in Germany. In one Berlin quarter an entire block of houses was sold to Danes, Swiss and Hollanders. Americans bought large apartment houses at absurdly low figures. A modern five-story Berlin apartment house of 60 rooms and worth 400,000 gold mk. sold for the equivalent of $13,000 at the rate of exchange prevailing in July, 1920.[38]

[36] The figures for 1920 are from the monthly circular of Stenger, Hoffmann & Co., Berlin bankers. Deutsche Allgemeine Zeitung, Jan. 3, 1921. The earlier figures are from British Board of Trade Journal, 1917.

[37] Frankfurter Zeitung, May 8, 1920.

[38] Berlin correspondence, Journal of Commerce, July 22, 1920.

Plants and often entire industries drifted into foreign hands. The German Transatlantic Electric Co., which owned and operated electric light and power systems and public utilities in Buenos Aires, Montevideo, Valparaiso, Santiago and Mendoza, was bought up by a syndicate of Spanish banks. The capitalization in 1914 was mk. 150 million, but in June, 1920, this was equivalent to about one-tenth that sum in gold marks.[39] The Royal Netherlands Blast Furnace and Steel Works bought up the large German plant of the Phoenix Company. An English concern bought up the mines and estates of the Prince of Pless, in Upper Silesia, and the mines and plant of the Prince Donnersmark of Silesia were bought by Americans. Belgian firms bought up zinc mines and zinc smelting plants in the same region. Dutch margarine companies purchased three large German oil-seed and oil-cake mills. British shipping interests bought up hotels in Bremen, Hamburg and Danzig. Frenchmen, Danes and Americans bought up office buildings and large blocks of real estate in Frankfurt and Berlin. The French bought up the river fleets of the Rhine, at Mannheim, Ludwigshafen, Mainz and Kehl.

The penetration of foreign capital affected also German banking interests. The Banque du Rhin established branches at Frankfurt, Cologne, Neustadt and Muhlheim, and the Banque National de Crédit of Paris opened branches in Mainz, Wiesbaden and Ludwigshafen. The Crédit Rhenin established branches in Cologne, Mayence, Aix la Chapelle and Sarrebruck.[40]

Foreigners denationalized German undertakings by the purchase of securities and plants, by the acquisition of the facilities of industrial, shipping and commercial concerns, and by the purchase of German banks or the establishment of foreign banks in Germany. Alarmed at this extensive invasion of German industrial property rights by foreigners, German capitalists checked the transfer of control out of German hands, by means of the amalgamation of industries, the concentration of capital, and the issuance of preference shares with comprehensive voting rights which were confined to German nationals resident in Germany. Upon the transfer of securities to a foreigner, all voting privileges lapsed. One of the difficulties of the system of multiple votes was that German capi-

[39] La Epoca, Madrid, June 21, 1920 and Commerce Reports, July 30, 1920.

[40] The New Europe, April 9, 1920.

talists were able with comparatively small capital to obtain control of large rival companies.[41]

(d) *Effect on German Bonds Abroad*—

As a result of the depreciation of mark exchange, debtors of German investors were eager to repay their loans. For example, the Province of Buenos Aires had mark bonds outstanding in the amount of mk. 40,800,000. The loan was placed with German banks in 1910 at 89. In the autumn of 1919 the Argentina gold dollar, normally worth $0.9648 American, or about four gold marks, was worth over 20 paper marks. The repayment of the mark debt would yield a handsome profit to the debtors and negotiations to extinguish the debt were initiated.[42]

On the other hand, German bonds issued in foreign currency presented another phase of the unsettlement of values. As the mark depreciated it became increasingly difficult for German corporations to pay interest on bonds issued in foreign currencies. In 1907 the *Elektrische Licht und Kraftanlagen A-G* in Berlin issued a 4½ per cent loan of fr. 10 million in Switzerland, the interest on which amounted to fr. 450,000 per annum. At the close of the financial year September 30, 1919, this sum at the prevailing rate of exchange amounted to mk. 1,980,000 and on February 13, 1920, the sum amounted to mk. 7,425,000 or about one-quarter the entire capital stock outstanding. As a result, the dividend had to be passed and as the loan matures in 1927, repayment seems impossible.[43]

C. Correctives of Depreciation

The correctives of depreciation in Germany were the same as in the other countries. On the one hand depreciated exchange tended to correct itself by stimulating exports. On the other hand, the government restricted imports for the purpose of improving exchange rates. Gold shipments were made chiefly to cover purchases of food and other indispensable goods. The sale of

[41] Haase, E., Das Eindringen Ausländisches Kapital in das Deutsche Wirtschaftsleben, Die Bank, Feb., 1920, pp. 106-119. Frankfurt correspondence, Journal of Commerce, Dec. 15, 1920. The New Europe, *ibid.*

[42] London Economist, Oct. 11, 1919.

[43] Deutsche Allgemeine Zeitung, Dec. 13, 1920. Koelnische Zeitung, Feb. 20, 1920.

securities and borrowing abroad were the financial correctives. Finally, the German government regulated trading in exchange with a view to eliminating violent fluctuations.[44]

Herr Erzberger, the Minister of Finance, in an address to the National Assembly, outlined the means for correcting the depreciation of German exchange, as follows:

Regulation of exports and imports.

Restoration of the customs frontier in the west, and prevention of smuggling.

Control by the Ministry of Finance of all transactions with foreign countries.

Securing of credit of neutral bankers.

Facilities for the purchase of raw materials needed by the German industries.

Prevention of emigration of capital.

Domestic order, stable political conditions and untiring labor.

i. *Trade Correctives*

(a) *Self-Correctives*—

The self-corrective effect of the depreciation of the mark was noted in the discussion on the effects of depreciation. In May, 1919, the ratio of exports to imports was 17.1 per cent. The ratio improved and in November, 1919, it was 28.9 per cent. In 1920 the ratio of exports to imports continued to increase from 49.00 per cent in January, 1920, to 74 per cent in March, 1920. In May, 1920, exports were greater than imports and the ratio was 120 per cent. For the first five months of 1919 the ratio was 35.0 per cent and for the corresponding period of 1920 it was 83.1 per cent.

(b) *Trade Policy*—

Even during the war the German economists preached that the post-war trade policy should aim to prohibit luxury imports, and to promote the consumption of substitutes made in Germany.[45] The Minister of Finance, addressing the Wurtemburg legislative

[44] Professor Mombert, Thoughts on the Balance of Trade of Germany after the War, Europäische Staats-und-Wirtschafts Zeitung, Apr. 27, 1918.

[45] George Bernhard, editor of Plutus, a financial paper, advocated this course continuously during 1918.

chamber, announced Germany's trade slogan as, "Export much and import little."[46] In order to restrict imports and to promote exports it was necessary to adopt as a permanent policy the increase of production particularly of goods for export and the decrease of consumption, particularly of imported goods. The increase of production required as a prerequisite the maintenance of industrial order, political stability and continued application to work.

(c) *Barter and Refining Credit*—

One of the effects of the depreciation of the mark was the resort to barter on a limited scale, particularly where the distances involved were not great. Barter was also one of the means of correcting the depreciation of exchange, especially in cases of bartering finished goods for the raw materials of which they were manufactured.

Examples of simple barter were common. Germany shipped coal, iron and steel to Holland and obtained Dutch foodstuffs, chiefly cheese and butter, in exchange. This practice was common even during the war, when German notes depreciated and the German government refused to ship gold.[47] Again in June, 1919, Switzerland and Germany entered into a formal arrangement whereby Germany agreed to permit the exportation to Switzerland of coal and briquettes, sugar and potash, in exchange for milk products, chocolate, vegetables, canned fruits and live stock.

A more extensively used form of barter, however, was the importation by Germany of raw materials, such as hides, and the exportation of boots and shoes made from the tanned leather. The arrangement involved one or more deals. Hides might be bartered for leather and leather in turn for shoes. Sometimes the entire output of finished products would be bartered again by the Dutch for some other German manufactured products, such as dyestuffs or drugs.[48] The scheme of bartering raw materials for finished goods was developed further. A group of bankers organized a trust company, the Deutsche Industrie Treuhand A-G, with the object of securing credit for German firms for the purchase of raw materials intended for reëxport as manufactured

[46] Berliner Zeitung am Mittag, Aug. 1, 1918.
[47] Norddeutsche Allgemeine Zeitung, Oct. 26, 1918.
[48] Report of Consul General S. Listoe, Rotterdam, Commerce Reports, Oct. 22, 1919.

goods. The corporation acted as trustee for these firms. The German manufacturer imported raw materials and gave his obligation in payment. In addition the manufacturer occasionally secured the endorsement of his bank. As the goods were made up there was an increase in the security underlying the obligation of the German manufacturer. The function of the trustee was to look after the interests of the foreign shipper with whom the title to the goods remained. By means of this arrangement the risk of fluctuations of exchange was avoided and it became possible for Germany to increase the value of its exports without depreciating the exchange rate of the mark as the result of prior imports of raw materials.

ii. *Gold Shipments*

Like France, Germany followed the policy of increasing its gold supply during the war in the hope of facilitating the resumption of specie payment after the war. Some exportation of gold was unavoidable. Germany offered to Dutch banks at very favorable terms two-year treasury bills secured by German municipal bonds and endorsed by German banks. Upon the refusal of the Dutch bankers to make the loan the Reichsbank was compelled to ship gold to Amsterdam. The rate of florins per 100 marks fell from 34.60 in June, 1917, to 7.10 in July, 1920, as compared with a parity of 59.20. With the permission of the Allied governments shipments of gold were made to Switzerland to the extent of 40 million gold marks for the repayment of loans negotiated during the war.[49]

The function of gold as a corrective of exchange is limited. Gold will correct the exchanges when there is a temporary and slight fluctuation. Under the conditions prevailing during and after the war shipments of gold alone would have been futile as a corrective, for the depreciation was not temporary, it was not due to trade causes but to inflation, and there was not enough gold in any of the European central banks to correct the exchanges. The shipment of gold would have exhausted the supply and national bankruptcy would have been inevitable.

[49] London Economist, July 5, 1919.

iii. *The Flow of Capital*

Important means of correcting German exchange were the sale of German holdings of foreign securities as well as German public and private securities, the speculative purchase by foreigners of marks, and long and short-term loans to Germany.

(a) *Sale of Securities*—

Like the governments of Great Britain and France the German government requisitioned foreign bonds under an order dated March 26, 1919. The government sold the securities and reimbursed the original owners. Furthermore, the government permitted the unrestricted exportation of specified foreign securities provided the proceeds of the sale abroad were placed at the disposal of the Reichsbank.[50]

Large amounts of German bonds were bought by American investors and speculators. At times the purchases ran as high as $1,000,000 a day, it is said, and the purchases included securities of the Imperial Government, of cities, of land mortgage banks, and of industries.

(b) *Foreign Speculation in Marks*—

The rapid depreciation of the mark stimulated the purchase of currency and drafts by persons who expected to make a profit upon the improvement of German exchange. As a result billions of marks flowed out of Germany. Bendix estimated that in the midsummer of 1920 over mk. 20,000 million of the mk. 64,000 million in circulation were held outside of Germany. Professor Taussig thinks the estimate too high. The purchase of marks by foreigners during the period of the decline arrested the fall. However, the large foreign holdings of currency and short-term bills tended to check a recovery in marks, for as the mark rose holders would sell, either to take a profit or to lessen their losses.

To check the depressing influence of the large foreign floating supply of marks, it was proposed to fund the holdings in the neutral countries of Europe, and to issue interest-bearing bonds and shares in German industrial enterprises. The funds thus accumulated were to be used in part to finance the imports of raw

[50] Commerce Reports, Nov. 3, 1919.

materials. The proposal for a "German Mark Central Banking Institute," however, was not consummated in spite of its many obvious advantages, not only to the Germans but also to the foreign holders of mark currency and bills.[51]

(c) *Borrowing by Germany*—

Even during the war plans were made for the sale in the neutral countries of German short-term loans and treasury certificates for the purpose of purchasing raw materials and maintaining the exchange rates.[52] To encourage borrowing abroad the German government in issuing import licenses gave preference to those applicants who obtained credit abroad. However, with the abrogation of the control of exchange and trade, this device was abandoned.[53]

The function of loans in correcting the depreciation of exchange is limited. As the exchange would improve upon issuing a foreign loan, the hoarded marks would tend to be thrown on the market and would thus neutralize the benefits of the loan intended to correct the depreciation. A large foreign loan would not put an end to the depreciation of the mark, for if the marks hoarded abroad were returned to Germany, inflation would be increased and the mark would depreciate further. Foreign loans could check depreciation only in so far as they furnished credit for the purchase of raw materials which would help restore production and exports. Upon the maturity of the loan the mark would depreciate further. Loans merely defer payments and do not afford a permanent corrective. However, if the postponement of the payment should enable Germany to recuperate in the interval, a foreign loan would have a permanent corrective effect.

1. Borrowing in Holland—In April, 1919, it was proposed that the neutral states make a joint loan of mk. 1500 million to Germany under the supervision of the Allies. Nothing came of the plan, however. Subsequent loans to Germany were made individually by the several neutral neighbors of Germany. During the

[51] Report of Commercial Attaché Norman L. Anderson, Copenhagen, Commerce Reports, Aug. 9, 1920. Report of Minister J. C. Grew, Copenhagen, July 16, 1920. Deumer, R., Valutaspeculationsbank auf hypothekarischer Grundlage, Die Bank, Jan., 1920, pp. 31-38.

[52] Commerce Reports, May 16, 1918.

[53] Cable of Commercial Attaché Edwards, Amsterdam, Commerce Reports, Oct. 28, 1919.

war these countries extended advances to Germany in a way similar to the advances made in the United States to the Allied powers before April, 1917. After almost a year of negotiation a revolving credit of 200 million florins, payable in 10 years at 6 per cent, was opened by Holland in favor of Germany, of which 60 million florins were to be spent in the purchase of foodstuffs from the Netherlands and the Dutch East Indies. On the other hand Germany bound herself to supply a certain quantity of coal to Holland monthly for four years and until 1953 to send to Holland half of the output of the mines in specified German territory near the Dutch frontier, at a price to be based on the monthly average price of English and American coal. This loan was finally ratified on December 28, 1920.[54]

A group of Dutch bankers, under the leadership of the *Nederlandsche Handelsmaatchappij,* opened a revolving credit of 60 million florins in favor of a group of German manufacturers for the importation of raw materials such as cotton, copper, and steel. Half of the manufactured goods produced from the raw materials was to be reëxported to the Netherlands and disposed of by the Dutch banking syndicate in order to pay the credit on which the raw materials were furnished.[55]

2. BORROWING IN SWITZERLAND—During the war Switzerland extended loans to Germany. The German government notified Swiss firms that certain goods would be admitted into Germany only on the condition that the Swiss exporters accept payment in mark credits maturing three months after the signing of peace. On the other hand, Swiss coöperative credit associations were formed for the purpose of financing luxury exports to Germany and thus keeping the industries going. The objections to the plan were that Swiss manufacturers had to pay for raw materials promptly and it was a doubtful economic policy to foster the importation of unnecessary goods into Germany.[56]

The shortage of coal in Switzerland during the war was one of the reasons for Swiss loans to Germany. A group of German banks received advances proportionate to the quantity of coal

[54] Koelnische Zeitung, Evening Edition, Jan. 22, 1920. Amsterdam correspondence, London Economist, June 19, 1920.

[55] Report, Commercial Attaché P. E. Edwards, The Hague, Commerce Reports, Jan. 21, 1920.

[56] Frankfurter Zeitung, July 11, 1917.

imported into Switzerland. But, in addition to paying for coal received, the Swiss coal firms had to give notes the proceeds of which were advanced to Germany against the deposit of securities.[57] The debt of Germany to Switzerland in the middle of 1919 was 350 million gold marks.

3. BORROWING IN OTHER COUNTRIES—During the war Germany also borrowed in the Scandinavian countries. Arrangements between a syndicate headed by the *Deutsche Bank* and the *Norges Bank* for a loan to refund previous loans and to furnish credit for German purchases in Norway under special trade agreements were concluded, whereby Germany furnished coal and other essential goods to the needy neutrals of Europe.[58]

The German government attempted to borrow the equivalent of about $100 million in Argentina for the purchase of foodstuffs at the time that the Allied governments were negotiating for a loan from Argentina of $200 million. Again under the post-war agreement between the Allied premiers and the German delegates, the Allied governments advanced money to Germany for foodstuffs and raw materials needed in Germany to insure the delivery of adequate coal to France under the Treaty of Peace. The total amount so advanced by the Allies up to the autumn of 1920 amounted to about £3 million.

iv. *Control of the Exchanges*[59]

(a) *Trade Bills*—

1. DEVISENORDNUNG—On January 20, 1916, an order of the Bundesrat, the Devisenordnung, created a Devisenzentrale, and provided that dealings in foreign exchange be reserved to specified banks and banking firms in Berlin, Hamburg and Frankfurt, which,

[57] Koelnische Zeitung, Aug. 8, 1917. Berliner Aktionar, Aug. 4, 1917 and Hamburgischer Correspondent, Aug. 2, 1917.

[58] Tidens Tegn, Sept. 15, 1918.

[59] Deutschlands Finanz-und-Handelsgesetze im Kriegs-Gesetze, Verordnungen und Bekanntmachungen aus dem Bank, Börsen-Devisenverkehr, Wahrungs-Finanz-und Steuerwesen, Handels-Wechsel-, und Schreckrecht in Deutschland während des Krieges, by Joh. Notzke, Librarian of the Reichsbank (Berlin, 1917, Carl Flemming Verlag). Interview with Herr Ludwig Bendix, chief of the Foreign Exchange Bureau of the Ministry of Commerce. Reported by Consul Frederick Simpich, Berlin, July 31, 1920.

under the supervision of the Reichsbank, should supply the foreign exchange necessary for the importation of goods. The argument in favor of the centralization of foreign bills was that the classification by countries and due dates made it possible to steady the fluctuations in exchange. Again, the prohibition of imports by legislation was likely to raise more hostility in foreign countries than the regulation of imports by a control of foreign bills. On the other hand there was strong objection to bureaucratic control of trade and to any hindrances to the free play of commerce whereby alone the mark exchange could be improved.[60] The importation of non-essential goods was prohibited soon thereafter as a means of regulating the mark. In January, 1917, orders were issued prohibiting the general importation and exportation of goods except by license of the Imperial Commissary for Imports and Exports. On February 8, 1917, according to additional exchange regulations permission of the Reichsbank was required for remittances to foreign countries of bills payable in marks and for the incurring of liabilities in foreign currency.[61]

The inconvenience to trade and commerce as a result of the Devisenordnung and the frequent protests against it after the armistice led to its repeal on September 15, 1919. The result was a sharp fall in foreign exchange, due in part to the release of control, in part to the vast increase in imports of goods, and lastly to the flight of capital, which was made easier by the repeal of the Devisenordnung.

2. DEVISENBESCHAFFUNGSSTELLE—In view of the fact that the government was a large importer of food and other essential goods, it was thought necessary to control at least that part of the foreign exchange business in which the government was directly interested. The Devisenbeschaffungsstelle for the regulation of government exchange transactions was organized in September, 1919, with a nominal capital of mk. 300,000, owned by the several government purchasing departments, the Reichseinkaufstelle, such as the Wheat Bureau, the Meat Bureau, etc. The Devisenbeschaffungsstelle, next to the Reichsbank was the largest purchaser of foreign exchange in Germany.

[60] Dr. Bernhard, editor of Plutus, in articles throughout 1917 and 1918. Also Weser Zeitung, Feb. 6, 1918.

[61] Koelnische Zeitung, Aug. 5, 1917.

3. THE REICHSBANK—The Reichsbank was a powerful influence in controlling foreign exchange. It accomplished this end chiefly by regulating the issue of credits and thus restricting imports. Upon the repeal of the regulations on July 23, 1919, the influence of the Reichsbank was reduced and imports greatly increased.

In order to provide exchange for essential imports the Reichsbank purchased export bills of exchange. By selling to the Reichsbank long-term bills drawn on foreign merchants by German exporters, they were protected from the risks of holding "futures" and the bank was able to provide importers with the necessary credits. Furthermore, the bank obtained "future" bills resulting from the sale of securities abroad and by the purchase of foreign bills and currency.[62] These Reichsbank operations in foreign exchange futures, Devisentermingeschaefte, helped to steady the market for exchange.

Foreign exchange transactions were left entirely unrestricted after August 19, 1920. Upon the release of control of the foreign exchanges, spot transactions only were permitted, so that a business man placing an order for raw materials for future delivery or contracting to deliver manufactured goods to a foreign buyer had no means of knowing how many marks he would pay or receive when the contract matured. On December 17, 1920, the Bundesrat approved a bill legalizing transactions by the public in foreign exchange futures, in the expectation of checking the wide fluctuations in exchange. German merchants could thus transfer the risks to dealers in foreign exchange.

(b) *Security Dealings*—

The control of foreign exchange involved bills arising not only from trade but also from transactions in securities with foreigners or for foreign account. To check the flight of capital the German National Assembly on August 16, 1919, passed a law prohibiting, except through the agency of banks, the exportation of all media of payment, such as currency, paper money, banknotes, drafts, checks and bills of exchange, involving German or foreign currency. Orders for the exportation of media of payment to foreign countries might be executed by banks only if application were made on forms prescribed by the Minister of Finance. A copy of the form

[62] Reichsbank Report, 1919. See also Federal Reserve Bulletin June, 1920.

was sent to the Property Tax Office. The Minister of Finance was also empowered to seize capital hidden or sent out of the country.[68]

v. *Fiscal and Monetary Correctives*

During the period of the suspension of gold payments the correction of foreign exchange may be accomplished by the deflation of the currency and the balancing of budgets. These two factors are inseparable. The failure to balance the budget leads to borrowing by the government from the central bank and to the issue of notes by the central bank against treasury bills. The depreciation of the currency resulting from fiscal and monetary causes can be corrected by deflating the currency, and increasing budget receipts. After government credit is deflated, the stabilization of foreign exchange with the existing gold supply may be undertaken. Before an effective control of foreign exchange by means of discount rates can be established, governments must balance their budgets, cease borrowing of the banks, and retire the excessive treasury bills, and the bank must cease issuing additional notes and reduce the amounts outstanding. The restoration of public credit is a prerequisite to the restoration of private credit, and both are conditions for the correction of the foreign exchanges.

[68] Paper No. 11 on Exchange Control, submitted to the International Financial Conference at Brussels. London: Harrison & Sons, Ltd., 1920.

SECTION B

FACTORS IN THE FINANCIAL REORGANIZATION

CHAPTER XIII

THE CAPITAL LEVY IN GREAT BRITAIN AND OTHER COUNTRIES [1]

A. Is a Levy Necessary?

i. *Distribution of Wealth*

The advocates of a capital levy base their proposal upon the poor distribution of wealth. Before the war, the rich, two per cent of the population of Great Britain, possessed 64 per cent of the

[1] Material in this chapter is based on the following sources:

Lawrence, F. W. Pethick, A Levy on Capital. London, George Allen & Unwin, Ltd., 1918.

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Allen, J. E., A Capital Levy. Fortnightly Review, 238–247, February, 1918.

Marriott, J. A. R., The Conscription of Wealth, The Nineteenth Century, 248–262, February, 1918.

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Samuel, Herbert, The Plight of the Taxpayer and the Remedy. The Contemporary Review, 601–608, December, 1919.

Pigou, A. C., The Problem of the National Debt. The Contemporary Review, 621–628, December, 1919.

House of Commons Debates, for 1919 and 1920. May 1, 1919, Cols. 440 *et seq.*, Oct. 30, 1919, Cols. 1040 *et seq.*

wealth; the comfortable class, 10 per cent, possessed 24 per cent of the wealth; the poor, the remaining 88 per cent, possessed 12 per cent of the wealth. These figures are based upon the inheritance-tax returns of Great Britain for 1913–14. The accumulation of profits during the war and their investment in war loans accentuated the uneven distribution of wealth, while the poor, as the result of inflation were deprived of purchasing power over goods. The advocates of the capital levy point out that the rich possess after the war as before, the greater part of the wealth of the country and in addition have a lien upon the production of wealth in the future.

ii. *Difficulty in Balancing the Budget*

The advocates of the levy maintain that it will be impossible to balance the budget owing to the high charges on account of the public-debt service. In the two years following the war the budget was made to balance by including not only current revenue, but also funds obtained from the sale of war supplies and other assets. However, the difficulties expected really are manageable and the Chancellor of the Exchequer was able to balance the budget of 1920–21 and expects to do so in after years without having to resort to a capital levy.

iii. *The Evils of High Taxes*

If the capital levy is not put into effect, its sponsors say that high super-taxes on income will be necessary. These encourage extravagance, for they take away incentive to work and to save. Furthermore, in a graduated scale of taxes, the rate on an addition to an income is always higher than the rate on the whole amount to which the addition raises it. Thus, extra effort is penalized and production is deterred. High taxes may compel the migration of capital and man power in order to escape the burdens on new accumulations of capital. A capital levy may induce an illegal flight of capital, but methods may be devised to prevent it, as in Germany. A capital levy leaves future production unburdened. Again high taxes result in an increase in the cost of production at home and in an inability to meet the competition of those countries that are not subject to similar steep taxes. Furthermore, to tax

interest on capital very heavily might destroy London's prestige as the world's central investment market.

iv. *Deflation Increases the Burden of Taxation*

The process of deflation after the war means a fall in prices and an increase in purchasing power of money. The real burden of taxation is therefore increased, and more goods or a larger percentage of the total national product must go to pay interest on the debt. It is economical for the state to get rid of its burden while inflated prices prevail. As prices fall the burden of liquidating the debt may embarrass the country particularly in a period of depression. War loans were floated when prices were high and if they are to be repaid when prices are low, the state will pay more than it received in goods and the holder will receive a greater purchasing power than he loaned to the state.

B. Policy in Handling the Debt

i. *The Psychological Factor*

Because the limit of exemption from the income tax is very low in Great Britain, there is considerable pressure back of the proposal for a capital levy. The large class of income-tax payers would benefit by a capital levy and they favor it. The security owners, who would bear the burden of the capital levy, oppose it. Viewed from the angle of selfish motives, the capital levy is an attempt to transfer the burden of debt from the large number of income-tax payers to the relatively small number of owners of property.

The capital levy shifts the burden from earned to unearned income, from current earnings to accumulated surplus. The capital levy bears heavily on existing productive power. The income tax, on the other hand, is a continuous burden levied on future productive power. High taxes would hamper future production, but a capital levy would free it from onerous tax burdens.

ii. *Permanent* vs. *Maturing Public Debts*

In England and in France before the war it was considered sound fiscal policy to consolidate the term debts in the form of a perpetual loan. However, the burden of the debts now out-

standing is so huge that this traditional policy is being discarded. It is even proposed to wipe out the entire debt or a large part of it in a single operation. On the other hand American statesmen favored a policy of a rapid repayment of the debt and followed such a policy after both the Revolution and the Civil War. This policy is justified by the fact that wars have occurred throughout history at brief intervals and it is therefore a measure of prudence for a government to be in sound condition. Furthermore, with the increasing development of democratic tendencies the social demands upon the budget will become greater and the public debt charges must not be permitted to hamper the sound development of vigorous nations.[2] The theory of the permanent debt is based on the economic fact that as the wealth of the country increases the relative burden of the debt decreases. Furthermore, to tax sufficiently heavily to repay the debt may interfere with the processes of production. Yet if the debt is held by comparatively few wealthy persons and the taxes paid by a larger number it may constitute a social injustice.

The repayment of national debts extends back over two hundred years. In 1715 the public debt of Great Britain amounted to £50,000,000 and the annual charge to about £3,000,000. The debt had doubled in about thirteen years and a capital levy was being urged to rid the country of the debt. As a counter policy Robert Walpole introduced plans for a sinking fund and in ten years almost £7,000,000 of the debt had been retired. In 1786 Pitt, Chancellor of the Exchequer, presented his plan for a sinking fund to pay off the entire public debt in forty-five years. Pitt stated his policy thus: "In all operations in finance we should always have in view a redemption. Gradually to redeem and to extinguish our debt ought to be ever the wise pursuit of Government. Every scheme and operation of finance should be directed to that end and managed with that view." A sinking fund has been operation in Great Britain for over a century.

Several refunding operations have enabled Great Britain to reduce the interest on her outstanding public debt. In 1749 the 4-per cent loans were reduced to a 3½-per cent basis. In 1784 Pitt funded the floating debt of over £18,000,000. There were

[2] Seligman, E. R. A., Fiscal Reconstruction. Chapter in American Problems of Reconstruction. New York, E. P. Dutton & Co., 1919, 3rd ed., p. 427–433.

several other attempts at refunding, the most successful of which was the operation of 1888 and 1889 when £565,000,000 3-per cent bonds were refunded into 2¾-per cent consols.[8]

iii. *The Levy on Wealth*

After military conscription was put into effect in Great Britain the demand for "a conscription of wealth" grew in importance. At the beginning of 1918 the War Emergency Workers National Committee advocated "that the Government ought to accompany the conscription of men by the conscription of wealth; that a suitable measure would be the immediate imposition, in lieu of any further loans, of a graduated levy on all capital wealth on the basis of the existing death duties." The question was raised in the House of Commons in the debate on the budget on the 23rd of April, 1918. Mr. Bonar Law, then Chancellor of the Exchequer, stated that "the question of whether or not there should be a conscription of wealth is entirely a matter of expediency, and I think it is a matter that concerns mainly not the working classes but the people who have money. My own feeling is that it would be better, both for the wealthy classes and the country, to have this levy on capital and reduce the burden of the national debt. The burden should rest practically on the wealth that has been created and is in existence when the war comes to an end so that it would not be a handicap upon the creation of new wealth after the war."

The levy on wealth has been proposed in two forms. The capital levy would apply to all wealth regardless of when or how it was accumulated. The levy on war wealth would apply only to wealth gained during and in connection with the war.

C. Principles of a Capital Levy

i. *The Problem and the Propoſed Solution*

As a result of the war the net private wealth increased from £12,500,000,000 to £15,000,000,000 and the state became indebted

[8] Hirst, F. W., Credit of the Nations, pp. 26–39.
Bastable, C. F., Public Finance, Book V, Chap. III.
Mill, J. S., Principles, Book V, Chap VII.
Ricardo, D., Principles, Chap. XVII.
Fisk, Harvey E., English Public Finance, pp. 121-5.

to the extent of about £7,600,000,000. Either under a capital levy or under income taxation, it is necessary to set off the public debt against private wealth. The fiscal problem is merely to determine which is the most suitable means of accomplishing this end. A levy on wealth would make it possible to draw upon the accumulated surplus.

The levy would not have to be paid in cash, but in some form of capital. Since the state does not intend to pay its current expenses out of the levy, but rather to reduce its obligations, either war loans or other securities would be acceptable. The levy would fall on the individual and the rate would be graduated in accordance with the extent of his wealth. The levy would be applied just once, not repeatedly at intervals, and would be used for canceling part of the public debt.

ii. *A Levy on Intangible Capital*

To avoid injustice, the advocates of a levy would not discriminate against material capital in favor of intangible capital such as brain power or personal skill. That is, they would assess not merely the factory, which yields profits, but the brain which produces wages or fees. The value of intangible capital is the present value of an annuity equal to the assessed income over a period of years equal to the individual's expectation of life.

The levy on a man's mental capital would be in the form of an additional annual tax, above the income tax. The present value of this annual installment during the actuarial expectation of life should equal the amount of the levy. The annual installment should be used not for meeting the current expenses of the state, but for the retirement of the debt.

iii. *A Capital Levy Would Supplement the Income Tax*

Income need not be the sole basis of taxation for the retirement of the public debt. Equal incomes do not imply equal ability to pay. For two pieces of property may be of equal value yet one may yield a very low income at present and have large returns deferred in the future after the redemption of the debt, whereas the other may have a large income at present, which may decline or even vanish in the future—before the redemption of the debt. In the former case the owner could evade an income tax, but could

not evade a capital levy. Non-income producing capital, with prospects of appreciation in the distant future, would attract funds whose owner seeks to avoid high post-war income-taxes.

However, the capital levy supplements the income tax not only from the point of view of property. From the point of view of income, two individuals with equal incomes cannot be expected to bear the same levy if one of them has a salary from terminable employment and the other has an income from capital investments. The differential tax on unearned income is an attempt to equalize the burden.

D. Misconceptions Concerning the Levy

i. *Capital Levy is not a New Proposal*[4]

A capital levy was urged in 1716 after the wars of Queen Anne's reign when the national debt had increased over 200 per cent. The agitation for a levy resulted in the plan for a sinking fund to retire the debt. The proposal was fathered by Hutchson, Asgill, Barbier and Hook. Ricardo in 1820 in his "Essay on the Funding System" advocated the plan. He reasoned that until it is redeemed a large debt entails a charge upon income in the future and no purpose is served in delaying repayment. His plea for a "ransom" was subject to the condition that the extinction of the debt should not be followed by further borrowing. Or the cancellation of the war debt by a general contribution was intended to prevent the formation of a new debt. In 1874 Menier, the French chocolate maker, advocated the conscription of wealth in a pamphlet entitled "L'impôt sur le capital." After the Franco-Prussian War, a capital levy was proposed by Carayon-Latour and Philippoteaux.

Furthermore, inheritance taxes, or to use the British term, death duties are a form of capital levy. However, they do not apply to the entire nation at the same time but only to the estates of the deceased of any one year. But unlike the capital levy death duties are applied not to the redemption of the capital liabilities of the state, but to current expenses, an unwarranted form of prodigality. The difficulties of assessment and of collec-

[4] Ricardo, Collected works, McCulloch, ed., p. 149; Mill's Principles, Book V, Chap. 7, Sec. 2.

tion which have been urged against the capital levy apply equally to death duties.

ii. *Capital Levy is not Equivalent to Repudiation*

Repudiation of its debt would not solve the difficulties of a country. Repudiation would constitute a breach of faith and would shatter confidence in its credit. Again repudiation would arouse international hostility, and might result in war or in military preparations which would amount to more than the money repudiated. Finally repudiation by a state would lead to the bankruptcy of the holder of its obligations. Repudiation is illogical and unjust because it would take all the wealth of the individual who loaned his money to the state, while leaving in full possession of his wealth the individual who invested his war profits in non-government bonds.

But the capital levy is not equivalent to repudiation. For example, Mr. A. Bonar Law, the former Chancellor of the Exchequer, who favored consideration of a levy, denounced repudiation as the means of solving the problem of the debt. "The repudiation of state liabilities would in my judgment be as disastrous as it would be dishonorable. Repudiation spells national dishonor and national disaster. . . . Whatever be the policy of the British Government after the war with reference to a capital levy I am certain that there will be no discrimination in favor of those who have withheld their money from the state at a time when its needs were greatest." [5]

There are several points of difference between a levy on capital and repudiation. A capital levy will fall on all British owners of property and not merely on investors in war loans. A capital levy will not affect non-resident foreign owners of British war debts. The limits of a capital levy would exempt the small property owner. Repudiation would not spare the smallest holder of government obligations. Repudiation is a breach of faith, but the capital levy is not. Repudiation would lead to extensive bankruptcy, the capital levy should not.

[5] New York Times, December 28, 1917.

E. The Method of Payment

i. *The Difficulty of Valuation*

(a) *The Per Cent Assessable—*

Professor Pigou uses the returns of inheritance taxes for the fiscal year 1914–15 and concludes that about 70 per cent of the total property of the United Kingdom passing at death is easily assessable, including securities, money on mortgage, insurance policies and cash and bank deposits. Of the remaining 30 per cent, 16 per cent, including house property, business premises and agricultural land, could be roughly assessed on the basis of existing income-tax returns. On the remaining 14 per cent, such as trade assets, good-will, household goods, and miscellaneous property, a tentative assessment could be made subject to revision under the inheritance tax upon their transference to heirs. Evasion would hardly be more undetectable under the capital levy than under income and inheritance taxes.

(b) *Method of Valuation—*

The valuation of wealth would be made not by a board of assessors, but by the taxpayer himself as in the case of the income tax. The detailed returns of income taxes, would furnish the tax authorities with a means of checking the taxpayers' valuation.

Of course, exact valuation is not attainable. There must be differences in the degree of accuracy in assessing various properties. Errors in valuation would be detected by subsequent official auditing of returns, and deliberate fraud would be checked by adequate penalties. Stock-exchange securities and even unlisted securities for which there is a market may be easily assessed. Securities of closed corporations would be valued by their directors under uniform regulations. Real property, always difficult to appraise, may be assessed for the purpose of the capital levy on the basis used in estate duties. Such difficulties as might be met would be no more serious, say, than the difficulties in securing income-tax returns from farmers.

ii. *Graduation and Assessment*

The principles that apply in income-tax assessments apply here as well. Individuals, owning properties of little value should be

exempt from the levy and rates should be graduated so to increase proportionately with the worth of the property. F. W. Pethick Lawrence has calculated the graduations in rates that would be required to wipe out varying fractions of the total national debt. To raise £900 million, capital below £200 would be exempt and the rates would rise from 1 per cent for the part of capital between £200 and £500 up to 11 per cent for the part of capital between £500,000 and £1,000,000. To raise £1,800 million, capital below £150 would be exempt and the rates would rise from 1 per cent for the part of capital between £150 and £200 to 5 per cent for the part of capital between £750 and £1,000, and to 11 per cent for the part of capital between £7,500 and £10,000. To wipe out the entire debt of about £7,500 million, the rates in the second table would have to be multiplied by about four.

iii. *Form of Payment*

The basic principle applicable in considering the method of payment is that not cash but a form of capital would be wanted. There are three groups of capital which would be acceptable. The first consists of securities which the state would wish to obtain and perhaps to keep, for example, long-term and short-term government obligations, high-grade foreign and colonial securities, and shares or bonds in British railways, banks or industries. Government obligations would be canceled on receipt, and thus directly reduce the public debt. Foreign and colonial obligations might at a favorable occasion be exchanged for foreign holdings of internal war loans or for war loans floated aboard. Securities in British enterprises might be held for their income to meet interest on the public debt or else may become part of the permanent property of the state. The second group of securities includes those which the state would hold for the sake of the income derived from them, such as industrial stocks and bonds, interest in land, and interest in industrial companies or firms. Eventually these would be sold to pay off the foreign or domestic debt or to purchase securities of the first group. The third group consists of other forms of wealth, such as liens on property, bearing interest and redeemable at the option of the taxpayer.

Individuals who had bought more heavily of war loans than their pro-rata share of the capital levy would sell their war bonds

to the government and receive in exchange securities which the government would obtain from those who bought less than their share of war loans. Forced sales would thus be obviated.

To induce the holders of war bonds to transfer them to the government, a slight premium above the market quotation might be paid. To realize on other securities the Treasury might issue lists of quotations such as were published by the Dollars Securities Committee during the war. These might be held by the government for their income and the depositors of these securities might have the option of redeeming them through the payment of an equivalent amount of war loan. It should not be necessary to resort to forced sales.

Again to avoid extensive selling of securities, capital levy payments could be made in installments out of income or through the us of credit facilities. For example, the farmer might give the state a mortgage on his land, and then by installment payments liquidate the mortgage. In the meantime the state could apply the income from the mortgage toward interest on the war loan. Finally, some persons might prefer to pay their assessments under the capital levy out of cash on deposit at the bank or out of savings. To facilitate payment in slightly marketable securities or in real property, special institutions might be created, like the war-time Darlehnskassen in Germany, to grant credit and thus to enable the taxpayer to pay in cash. The small number of persons who could not meet the capital levy by any one of the above three methods should then have the option of paying in installments, a sort of special income tax. Peculiar difficulties might be referred to a commission which would function through representatives who are familiar with local conditions.

iv. *Evasion*

Evasion of the capital levy could be reduced by checking the taxpayers' assessment against the returns on income and property taxes. Evasion would be temporary in many cases, for the inheritance taxes would reveal the true value of doubtful assets. On the other hand, if the rich hoped to escape the capital levy by buying non-income producing goods, such as jewelry, the prices of these commodities would rise before the levy, would fall after the levy, and the fall would thus constitute a form of capital levy.

Similarly the attempt to dodge the levy by the purchase of bearer bonds would tend to increase their price and lower their yield and would thus constitute a form of levy.

F. Advantages and Benefits Expected of a Levy

As a result of the levy the aggregate real wealth of the country would remain unchanged. However, its distribution would be changed, for the very wealthy would have their assets reduced. The state would reduce its liabilities, and the annual debt charges would therefore be decreased or eliminated. The floating debt causes inflation, either by increasing government deposits or by forming the basis of private loans at the banks. Its elimination would produce deflation. Cancellation of part of the debt out of savings would have a similar result. A capital levy would enable Great Britain to reduce its floating debt, which can be handled only with great difficulty and thus tends to depress the price of war loans as well as industrial securities and to reflect upon soundness of public and private credit.

The capital levy would lower the rate of interest on new capital and would raise the value of depreciated securities. War-time borrowing called for large amounts of money, rates of interest rose, and the value of then existing securities was depressed. The depreciation of outstanding securities as the result of war-time borrowing constitutes a disguised, unjust, and indiscriminate levy, which would be undone by a public capital levy based on ability to pay. The high rate of interest prevailing after the war is detrimental to the restoration of industry and trade, and to the progress of social legislation.

The capital levy would also make it possible to wipe out the foreign debt, to rectify exchange rates, and in turn to help restore the trade balance. For not only does the interest charge on the foreign debt constitute an invisible debt in the foreign-trade balance, but as a result of inflation and of high prices the invisible credit balance of Great Britain can purchase less goods than it did before the war. After a capital levy, prices would fall, and the invisible credit, shipping charges and banking fees, would support a larger volume of net merchandise imports.

Finally, if a capital levy is not put into effect, the only alternative method of handling the public debt will be through high

income taxes, which will tend to repress energy and effort and will fall particularly on current contributions to wealth. On the other hand if the capital levy is put into effect it will settle the old accounts and leave the future free from burdensome taxation.

G. Objections to the Capital Levy

i. *The Analogy to Military Conscription Erroneous*

The advocates of the capital levy justify it on the grounds that military conscription took the lives of the young and that the conscription of wealth will call for an equitable sacrifice on the part of the old men to compensate for exemption from military service. But the underlying assumption is wrong. The distinction is not true to fact. Many of the young who fought have considerable property and men of mature years were in the military service. Again, if the old men themselves did not fight, their sons did. Besides, the widows and orphans of those that made the supreme sacrifice would have to make the second sacrifice involved in the capital levy.

Equality of taxation or equality of sacrifice as stated by economists can be used only in the financial sense—two individuals or two properties of like worth should bear equal burdens. But it is a misapplication of the concept to attempt to measure the sacrifice of life or limb in monetary terms. The opponents of the capital levy deny the equity of such a plea.

ii. *The Self-Corrective Nature of a Heavy Debt*

A heavy debt has, temporarily at least, certain advantages, for it curtails public extravagance and checks private expenditure. It was the heavy burden of post-war taxation in the United States that prevented the passage of a bill to provide bonuses for soldiers who were not incapacitated and who had never even been overseas. A heavy debt is a reminder of the costliness of war and tends to check the military party of the several governments. The excellent pre-war fiscal condition of Germany in 1914 reenforced the arguments of its militarists in favor of precipitating war.

If a capital levy were to be put into effect it should be possible greatly to reduce the income-tax rate, below the war-time level, providing no other new expenditures were developed. The great

reduction in the tax rate, however, would be an incentive to legislative bodies to careless public expenditure.

iii. *Taxation, a Preferable Solution*

(a) *High Taxes are Accepted Facts*—

The country became accustomed to high rates of taxation during the war, and these rates are now accepted and are uncomplainingly borne. It is contended that high income taxes deter saving. A capital levy, however, would have the same effect for it would introduce the element of insecurity which would vitiate the admitted value of subsequent low taxes in inducing saving. During the war the country raised by taxation not only the interest on the growing debt, but also a substantial portion of its war expenses. After the war, it should not be very difficult to secure by taxation sufficient revenue to pay the interest on that debt.

The proponents of a capital levy maintain that high income taxes would injure industry. But this argument is not valid. Such taxes as fall on production may repress it, but taxes on consumption and taxes on persons would not necessarily have this effect. Again heavy taxation may have the effect of stimulating activity upon the part of those who desire to maintain pre-war standards of living, and must work harder to do so. Although high taxes may diminish the net return of the individual manufacturer, yet money is not the sole motive in business activity. The joy of achievement is an important factor. Moreover, the relative position of the individual in the community and not the absolute amount of his wealth is an incentive to effort. The imposition of a heavy income tax affects all incomes and does not greatly modify the relative financial standing of two taxpayers in the community. And finally the present income tax has not checked saving in the past although surplus funds have been taxed twice, once as earned income and again as unearned income or interest and dividends.

(b) *The Tax Burden Inevitably Declines*—

The opponents of the capital levy point out that there is no need for it since the burden of annual taxation tends to decline for a number of reasons. As the resources of the country are developed, and as production and the national income increase, the waste of war is replaced, the demand for capital declines, and

the supply increases. Interest rates fall. It then becomes possible to refund the loan at a lower rate of interest. The rate of taxation required to meet the charges on the public debt may be lowered. If interest rates fall, and tax rates are maintained, it then becomes possible to redeem the debt out of tax revenues, through the operation of a sinking fund. The financial history of Great Britain after the Napoleonic Wars illustrates these movements.

The effectiveness of this argument of the opponents of the capital levy is admitted by its advocates, who contend that the fiscal problem is not a matter of the distant future but a question of the years immediately following the war.

(c) *The Capital Levy as a Form of Income Tax*—

Since the capital levy must take the equivalent of the capital value of the high income taxes which it replaces, there is nothing to be gained thereby. Again there would be cases in which the capital levy would be paid in annual installments out of income, as in the amortization by the owner of a state lien on private property or in the settlement, out of annual income, of the levy on intangible capital, and therefore the capital levy would really become an income tax in form. The German and Italian capital levies are payable in installments.

Since intangible capital must meet the levy out of income in addition to the regular income tax, all the arguments against high income taxes and in favor of the capital levy must fall. If this annual installment on account of the capital levy is too steep, it will deter future effort. In fact the installment payment defeats the very object of the levy, which is to wipe out part of the debt at once while prices are high. Payment by installment is not only contrary to the principle of the capital levy but it is an economically faulty method, for it commits the taxpayer to a series of payments in the future based upon a valuation at a particular moment. It is more than likely that the capital valuation would change as well as the annual income out of which installment payments would be met.

iv. *Capital is More Productive in Private Hands*

If capital is left in private hands it will be more productive than if the state takes it over by a levy. For the individual works

under incentives which the state lacks. As a result a loss is incurred by taking capital instead of leaving it in private hands. The capital levy takes the principal itself, whereas taxes take only a part of the profits. If the state levies on property it must either sell the assets and inevitably unsettle the sensitive market for securities or else the state must operate the property and will do so less efficiently.

There is a fundamental defect inherent in the capital levy. If the public debt is allowed to stand, the rate of interest which the state must pay on its bonds is with respect to the private rate relatively low and therefore, the tax upon the national income is correspondingly low. But if as a result of the capital levy the public debt in part is offset by state-held mortgages on private property (whose owners had less of war loans than their pro-rata share of the capital levy required), then the interest payable under a capital levy on the state-held mortgage would be higher than the income tax payable (by the owners of the property), to meet interest on war loans if the levy were not put into effect. The difference between the income tax rate necessary to meet the charges on an existing war debt and the rate of interest payable on the state-held mortgage under a capital levy may bankrupt many undertakings in a period of business depression, or at any time those undertakings which are operating on a close margin of profit.

v. *The Fear of a Repetition of a Capital Levy*

The more successful the first capital levy, the greater would be the danger of its repetition. It is idle for its advocates to give assurances that it will not be repeated, for they admit that "no Parliament can bind its successors." Therefore, the exemption of future savings from a capital levy is meaningless, and the initial capital levy would check future private economy. The occasion for the repetition of a capital levy might be either to pay off the balance of the debt, if the original levy should dispose of only a portion of it, or else it might be used to meet growing public expenditures. In either event a repetition would deter thrift and restrict production in the future, in which case its advantage over a high income tax would cease to exist.

The fear of the repetition of the capital levy might lead to an insecurity and lack of confidence in the British investment market.

London has been the financial capital of the world. It might cease to be so when its prestige should be shaken by striking departures in economic practices. Foreign capital might cease to flow into British markets and British capital itself might seek the shelter of governments which are either in less dire financial straits or else are less willing to undermine their credit reputation.

Finally there is danger of a continuous repetition until all capital would be destroyed. It is an axiom of taxation that a productive source of revenue once developed rarely remains unused. The graduated income tax, originally a war measure, was continued under peace conditions.

vi. *Administrative Difficulties*

The attempt to set off private wealth against the liabilities of the state is fraught with all sorts of administrative difficulties. If special inducements are offered that holders of the war loan may turn in their bonds, the cost to the government of the levy is raised. Again property surrendered in lieu of a war-loan bond would have to be assessed and might be unacceptable to individuals holding a surplus of war-loan bonds which the government would desire to trade for private property.

(a) *Capital not as Definite a Basis as Income*—

Income as the basis of taxation is a definite and readily ascertainable sum, the accuracy of which may be checked from former income-tax records. Capital is not ascertainable so easily. At best it can only be estimated and not easily checked. Furthermore, if the capital levy is spread in installments over a long period of time, annual payments for ten to thirty years are based on an untrustworthy assessment at a particular moment. Difficult as is the valuation of material capital, that of intangible capital would be more so. The estimates of intangible capital based on actuarial mortality tables would be subject to frequent revision. If a professional man's earnings declined he might have to stop paying his annual instalment. If his earnings rose it would be necessary to revise the valuation of intangible capital.

The difficulties in appraising capital are illustrated by the failure of the land-valuation scheme which was urged upon Great Britain in 1909-10 by Lloyd George. A large part of the valua-

tions have been set aside by the courts and the work of the assessors has been characterised by Austen Chamberlain, Chancellor of the Exchequer, as follows:

"To a very large extent they are valuations of metphysical transactions arrived at by elaborate mathematical calculations that nobody but an expert can make and as to which the layman may doubt sometimes whether the expert himself even understands them."

(b) *A Large Percentage of British Property Difficult to Assess*—

Professor Pigou, a prominent advocate of the capital levy, estimates that from 13 to 20 per cent. of the total British private property would be difficult to value.[7] On the other hand J. C. Stamp, one of the leading statisticians of Great Britain, in an unpartisan presentation says that "upon a rough analytical estimate probably 55 per cent. of the total would be susceptible of close or approximate valuation upon readily available lines (e.g., mortgages and loans fixed in amount and fully secured ground rent, and secured investment income subject to market quotations), and the balance of 45 per cent. (e.g., marginal values of property less its charges, ordinary shares, personal property, etc.) would necessarily constitute the real crux of the practical problem."[8]

(c) *The Adjustment of Errors*—

Owing to the complexity of the task, the numerous doubts, the lack of experience with previous similar taxes, a huge number of errors would have to be audited by the state. This would involve a gigantic task and the maintenance of a large staff. The arrears of hundreds of millions of excess-profits taxes resulting from the auditing of the tax returns indicate some of the difficulties of administering the capital levy. It has been suggested that tentative returns be made and that the final adjustment be postponed. Pending the readjustment a fixed rate of interest would be charged for the use of unpaid taxes. But the fixing of a low rate would induce the taxpayer to undervalue his returns and a high rate might saddle the state with the interest on overpayment.

[7] Economic Journal, xxviii. 110: p. 149, June, 1918.
[8] Economic Journal, xxvi. 111: p. 286, Sept., 1918.

(d) *Fraud and Evasion*—

The temptation to fraud in the case of the capital levy would be great for the amount involved would be very large, representing a substantial portion of a life's savings. Taxes on annual income are less likely to be evaded. But the capital levy would be declared just once and there would not be the annual check on fraud through successive returns as in the case of the income tax.

vii. *The Capital Levy a Panacea which Delays the Real Remedy*

The capital levy is held up as a panacea to cure the fiscal ills of a debt-laden country. To the extent that it absorbs the thought of the country, it diverts attention from the basic principle of fiscal reconstruction, that only by producing more and consuming less, by working and saving, can the surplus depleted by war be restored.

To the extent that the capital levy is workable, a variation of it is in effect. Under an inheritance tax, the heir cannot get possession of the estate without the consent of the state and the transfer of the property from the deceased to his successor is a much more public fact than the continued possession of property.[9]

A form of capital levy affecting owners of securities is already in effect, for the depreciating of outstanding securities has been a continuous process since the beginning of the war. The average price of British consols declined from 74.9 in 1914 to 55.0 in 1919, a fall of 26½ per cent. Similarly the low price of the Bank of England stock declined from 234 in 1914 to 186 in 1919, a depreciation of about 20½ per cent.

The monthly average value of 387 representative British securities compiled, declined from £3370 million in July, 1914 to £2634 million in June, 1918, or 22 per cent, and in December 1920 to £2320 million, or about 31 per cent.[10]

This depreciation of securities should satisfy those that seek to haye the rich deprived of their property. Furthermore, the graduated income tax can accomplish this end as well as a capital levy.

[9] Mitchell, A. A., A Levy on Capital. Economic Journal, Sept., 1918, p. 274.

[10] English Public Finance, p. 218-220, and Bankers Magazine, Aug., 1914, July, 1918 and Jan., 1921.

H. Objections Answered

i. *The Ethical Objection*

(a) *The Capital Levy is Unjust*—

The opponents of the capital levy maintain that it is neither just nor equitable. However, no tax can be perfectly just. Nor is the capital levy less equitable than the steeply graduated income tax. If governments were limited to taxes which were fair to everyone, adequate revenue would be impossible to obtain. The urgent need for funds is as important a consideration as the desire for absolute fairness.

(b) *The Capital Levy Constitutes a Breach of Faith*—

The state permitted or encouraged the accumulation of capital on the implied promise of protection. The whole theory of savings is based on the safety of property. It is said, therefore, that a capital levy would constitute a breach of faith on the part of the state and would be the beginning of the end of private property. But opponents of the capital levy overlook the fact that every social advance in the past has constituted an abridgment of the rights of the individual and an enlargement of the rights of the community. The break with tradition is the mark of a progressive society.

(c) *The Levy on Capital is Discriminatory*—

It is held that the levy on capital would plunder the rich. But it would not do so any more that the graduated income tax. Again it is held that the levy is an added tax on unearned incomes. However, the levy would apply to all property, non-income bearing as well as income bearing. Finally the opponents of the levy say that it is unfair to exempt large incomes, derived from brain power and intangible capital, while small properties are taxed. The answer is that intangible capital may be subjected to a levy by capitalizing the actuarial life value of the annual income. On the other hand, below a reasonable limit, small accumulations of capital would be exempt.

ii. *The Economic Objection*

(a) *The Levy Will Harm Industry and Commerce*—

It is said that business men would be unable to pay the levy without facing ruin. However, since it would not be necessary to pay in cash, the business man might mortgage his property to meet the capital levy and either pay the proceeds to the state or else pay off his mortgage, if held by the state. The interest on his mortgage need not be much greater than the amount of his income tax would be if there were no levy.

The opponents of the levy say that it would drive capital out of the country, and would destroy the international position of London. However, the tax might be made retroactive as of a certain date so that money could not leave the country to escape the levy. Again the countries of refuge for money escaping the capital levy would be few in number for where the levy is not laid income taxes are very likely to be high.

(b) *The Levy Will Deter Saving and Foster Extravagance*—

The argument runs that a levy would discourage saving. But high income taxes, which would have to be imposed in the absence of the levy, would also check savings. Furthermore in the upper groups a levy will not check savings because there is an automatic surplus of income above even high standards of living. Again it is less likely that a capital levy, which would be applied just once, would repress savings as much as an annual income tax with high rates. As a matter of fact the capital levy should be followed by a period of low income tax rates, which in turn would encourage saving.

It is said that a capital levy would be a penalty on thrift and lead to extravagance. The argument is not valid because all taxation is a penalty on thrift. People can escape this penalty by not working. A capital levy would not lead to extravagance any more than does the inheritance tax, a modified form of the capital levy. The impulse to achievement and position in the community is not checked by the fact that at death a large part of the income of the decedent is to be taken from him. The capital levy would probably have as little effect in fostering extravagance.

iii. *The Administrative Objection*

The opponents of the levy point out the difficulties of assessment and the likelihood of evasion. However, the war has left a huge debt and big problems in the solving of which there must needs be difficulties. Evasion and understatement may be checked through other tax records. Indeed dodging of the capital levy need not be undetectable.

It is said that the capital levy is impracticable because it would lead to a panic on the stock market when securities would be liquidated to meet the levy. However, the levy would not be paid in money, but in securities of various kinds. Again the opponents of the levy affirm that the state would be unable to manage the property taken over in settlement of the levy. But the state would not have to manage it, for most property is in the corporate form and the state can hold shares as well as an individual can.

iv. *The Danger of Repetition*

The opponents of the capital levy maintain that if it is likely to fail it should not be tried, and if it is likely to succeed there is danger of its repetition and of the final abolition of private property. However, the decision to repeat the levy rests with the people and with their representatives. Not only the capital levy but the whole problem of government is dependent upon the common sense and the judgment of the people. They must be trusted to act cautiously and justly. Judgment and common sense would determine whether or not the capital levy would be repeated.

I. The War Wealth Levy

i. *The Justification of the War-Wealth Levy*

The war-wealth levy is justified on the ground that if the war had been scientifically financed there would be no need for a war-wealth levy. The increase in wealth during the war resulted from advantage taken of the nation's needs in a crisis. The war demanded sacrifices from all. Huge profits should not have been made, but once having been made they should now be reclaimed

by the state. War profits, left after taxes, contributed nothing to the war and should be taken at the end of the war to liquidate the resultant liabilities. War-made wealth, it is argued, consists chiefly of slacker dollars, accumulated through profiteering and at the expense of the country. War wealth should pay war costs.

The war-wealth levy may be justified on a number of grounds. It would tend to allay the unrest which resulted from the contrast between the burdens that inflation generated by the war imposed upon the poorer classes and the great fortunes which were accumulated by the war profiteers. The allaying of social unrest would tend to increase production and exports and thus probably aid in restoring the exchange. By retiring the floating debt and Ways and Means advances, the war-wealth levy would aid in the deflation of currency and credit and lower the cost of living. Furthermore, it would reduce the outstanding indebtedness and afford relief from heavy taxation. It would improve the national credit and thus make possible the refunding of the outstanding bonds on a lower basis.

ii. *Objections to a War-Wealth Levy*

It is said that the war-wealth levy is unjust because it taxes unequally two individuals, having the same present capital and income, and that it violates the principle of the equality of sacrifice. By regarding the war as a distinct period in the economic history of the country, it seems just and reasonable to insist that war wealth should pay war charges for if the undue advantages accruing to particular individuals during the war were eliminated, the principle of equality of sacrifice would prevail.

Another objection to the war-wealth levy is that it reopens the question of the excess-profits tax. However, the government never gave any pledge that the excess-profits tax was a final settlement of the question of war profits nor did it ever waive the right to impose a higher or a different tax on war profits. Furthermore conditions have changed and plants which were written off during the war out of excess profits, increased in value after the signing of the armistice. Again it is objected that the war-wealth levy does not make any distinction between increases in wealth due to the war and increases in wealth not due to the war. The refutation of this point is that suffering was widespread during the

war and that no wealth, however acquired, during the crisis should be allowed to remain. Furthermore the state allows a variety of abatements in order to minimize the injustice of the war-wealth levy. Finally it is argued that the war-wealth levy challenges the profit motive and checks the driving force of industrial life. However, the profit motive has been questioned before the war in the development of social legislation as well as since the war in the regulation of prices and of profits.

iii. *The War-Wealth* vs. *the Capital Levy*

Both the capital levy and the war-wealth levy are attempts to clear the nation of a large part of its burden by a single measure. The income tax would solve the same problem by a series of levies over a period of years. There are several points of distinction between the war-wealth levy and the capital levy. The capital levy would take profits earned before or during the war according to the rules of the present social system. The levy on war-wealth would take only those profits that were acquired in the nation's distress. The capital levy counteracts the profit motive and the war-wealth levy, the profiteering motive. The capital levy would take the fruits of historic enterprising, the war-wealth levy would take the fruits of war-time exploitation. The war-wealth levy differs from the capital levy much as the war-profits tax differs from the excess-profits tax. The standards of the former are pre-war profits, and of the latter percentage of capital.

iv. *The Theory and Method of the War-Wealth Levy*[11]

The Select Committee of the House of Commons appointed to inquire into the proposal to impose a tax on war-time increases of wealth, and to report whether such a tax is practicable, and, if so, what form it should take, have agreed to the following report:—

* * * * * * * * *

[11] Copy of Final Report from the Select Committee on Increase of War Wealth to the House of Commons, May 13, 1920.

4. The Board of Inland Revenue have come to the conclusion, that the only practicable method of approaching the problem is by a comparison of the aggregate wealth of individuals as ascertained by a valuation at two fixed dates, and they contemplate that duty would be charged at graduated rates on the increase shown by these two valuations. The dates suggested by the Board are the 30th June, 1914, and the 30th June, 1919.

5. Under the suggested scheme, taxpayers liable would be required to furnish returns giving particulars of their wealth both at home and abroad at the two dates, and stating the value of the assets at each date. In order to avoid delay, provisional assessments would be made on the basis of the values shown in the returns. In any case where, it was found that the provisional assessment was incorrect, that assessment would naturally be subject to revision.

6. It is contemplated that the duty would be payable either in cash or by the transfer of Government Stock or other approved securities and that in cases where the payment of the duty in a lump sum would involve the taxpayer in difficulties, e.g., in cases where a taxpayer's resources are locked up in business, payment would be acceptable by installments with interest over a period of years.

7. The scheme provides for the constitution of a strong appellate body to decide disputed questions (subject to an appeal to the courts on points of law) and for the imposition of heavy penalties to check evasion.

8. In the memoranda in which this scheme was placed before your Committee, the Board of Inland Revenue submitted for purposes of illustration two graduated scales of duty. Under these scales, duty would be charged at rates ranging from 28 per cent to nearly 80 per cent on the amount of the increase shown by the two valuations, subject to a general tax-free allowance, in one case of £2,000, and in the other of an amount equivalent to 10 per cent of the pre-war wealth. Under both scales it was suggested that persons whose post-war wealth did not exceed £5,000 should be exempt from the tax. It was estimated that the yield of duty under these illustrative scales would amount to £900,000,000 and £1,000,000,000 respectively.

The Board of Inland Revenue estimate that the aggregate of the individual increases of wealth for the whole population of the United Kingdom is £4,180,000,000, and that if the increases in the hands of those persons whose post-war wealth does not exceed £2,000 are excluded there remains an aggregate increase of £2,846,000,000 in the hands of 340,000 persons, and it is only to this reduced sum that the original scheme would apply.

9. On a close examination of the suggested scales, it became evident to your Committee that, unless far heavier tax-free allowances were granted than those for which provision was made in these two scales—

(a) The proposed tax would fall, not only on the class who had large profits owing to the exceptional conditions arising out of the war, but equally on those citizens who had increased their wealth by hard work and severe economy; and

(b) Liability to the tax would arise in cases where the only increase of wealth was an increase in money-value due to the general reduction in the purchasing power of money.

* * * * * * * * *

v. *Conclusions of Committee on War-Wealth Levy*—

17. The terms of reference to your Committee direct them to report on two questions, viz:—

(a) The practicability of a tax on war-time increases of wealth:

and

(b) If such a tax is practicable, what form it should take.

After a close examination of these questions and consideration of the evidence, laid before them, your Commmittee have come to the following conclusions.

18. They are of opinion that, although the administration of a tax of this character would involve many difficulties, yet those difficulties should not be insurmountable, and in its main features the scheme of the Board of Inland Revenue, is practicable in an administrative sense, inasmuch as:—

(a) The examination of taxpayer's returns, valuation of property and assessment and collection of duty could be carried out in an effective and impartial manner;

(b) The cost of administration and collection, having regard to the amount of the estimated yield, would be small.

On the other hand, the duty of the taxpayer to furnish a return of his wealth at the two dates, and a statement of its value would involve him in both trouble and expense.

19. The effect of the large abatements now proposed is that the burden of taxation would, in the main, be cast only upon those individuals who could most justly be called upon to make the sacrifice and that the tax would discriminate against those who had made exceptional profits in consequence of the war conditions.

20. As regards the question of practicability in its wider sense of expedience and desirability your Committee feel that this question is one which can only be determined with regard to national and financial conditions in general.

21. If the financial position of the country is such that it becomes a matter of urgent necessity to raise a sum of the magnitude of £500,000,000 which cannot be obtained by other means, the objections raised against a tax of this character should not be allowed to stand in the way of the imposition of such a tax to meet the national emergency. Moreover although the suggested tax is strongly opposed by the financial and commercial world, there is, on the other hand, a very large body of public opinion which regards it not only as expedient but as a just and necessary attempt to equalize the losses suffered during the war.

22. Your Committee desire to point out, however, that since they were appointed the financial conditions governing the problem have been largely modified:—

(a) By the budget proposals of the Chancellor of the Exchequer, including the proposal to increase the rate of excess-profits duty as an alternative to a tax on war-time increases of wealth.

(b) By the offer of the new 5-15 year treasury bonds.

23. Whether in the present financial position a tax of this description is desirable or expedient as an alternative to excess-profits duty or to the taxation of profits in any other form is a matter on which your Committee feel that it is not within their province to pronounce an opinion and they must therefore leave that question to the decision of the House of Commons.

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24. The scheme put forward by the Board of Inland Revenue might be adopted, subject to modification on certain points. Among these are the following, to which your Committee attach considerable importance:—

(a) That special relief be granted in the case of combatants who have been disabled as a consequence of the war and of dependents of those who have lost their lives while fighting.

(b) That war securities be accepted in payment of duty at not less than the issue price;

(c) That the large general abatements granted under Scale C (2) render it unnecessary to grant special allowances to taxpayers who are married and have dependent children.

J. Summary

i. *In Favor of the Levy*

It is theoretically desirable to wipe out the debt while the value of money is low; otherwise the burden becomes increasingly heavier. Both the war-wealth levy and the capital levy would wipe out the floating debt and a good part of the foreign debt, would raise the value of existing securities, would lower the rate of interest on new capital, and would release future production from taxation.

ii. *In Opposition to the Levy*

A moderate capital levy is not essentially different from a steep income tax, particularly if the levy calls for payments on the instalment plan. John Stuart Mill said that a capital levy "would be merely surrendering to a creditor the principal sum, the whole

annual proceeds of which were already his by law and would be equivalent to what a landowner does when he sells part of his estate to free the remainder from mortgage."

Ricardo pointed out that a "man would be equally rich whether he continued to pay £100 per annum, or at once and only for once sacrificed £2,000." Prof. Heinrich Dietzel stated that there is no difference between a single or a recurrent payment, between a capital levy or an income tax, between the "terrible end" and the "endless terror." The objections to a single levy are economic and administrative. In attempting to effect a transfer of property from persons who subscribed to fewer war bonds than the equivalent of their pro-rata share of the levy, to persons who subscribed more than their share, the state would meet with many difficulties. From 20 to 45 per cent of the total private wealth is difficult of assessment. The levy would be based on an indefinite and estimated amount, capital valuation. Capital in private hands is more productive, so that the burden of the debt could be met more easily if property remained undisturbed. Finally the transition period has many inevitable perplexing problems and it is inadvisable to add to them a procedure, the advantages of which are doubtful and the difficulties of which are very evident.

iii. *Official Action*

On June 2, 1919, the House of Commons rejected by a vote of 317 to 72 the proposal made by the Liberal party and indorsed by the Labor party for a levy on capital as a means of discharging part of the war debt. The question was brought up again and on February 16, 1920, the House of Commons, by a vote of 167 to 62, on the government's motion for the appointment of a committee to inquire into the practicability of a tax on the war-time increases in wealth, defeated an amendment to extend the inquiry to the practicability of a general capital levy to reduce the national debt. Austen Chamberlain, the Chancellor of the Exchequer, argued that the capital levy would encourage extravagant spending, discourage saving, check enterprise and create fear and insecurity. He believed that heavy death duties "constituted the only possible and practicable levy on capital. It is paid once by every individual estate in addition to the heavy income tax paid during the lifetime of the owner of the estate."

The war-wealth levy never came to a vote. On June 7, 1920, the Chancellor of the Exchequer stated in the House of Commons that "the government, after full consideration of the report of the Select Committee, and of the respective advantages and disadvantages of the suggested scheme for a levy on war-wealth, have come to the conclusion that the dangers attendant upon such a levy altogether outweigh any advantages which could be derived from it, and have decided not to make any proposals in that sense to the House."

Mr. Chamberlain pointed out that the returns from the levy would be less than were expected, that the originally estimated billion pounds sterling could not be obtained without injustice and disaster, and that the final estimate of 500 millions was hedged about with conditions. The Select Committee had neither recommended nor approved the tax but had left it to the decision of the Government. They had shown that no distinction could be made between profits made as a result of the war and those made merely during the war, or between wealth due to increased earnings and that due to increased economy. The difficulties of valuation would be similar to those of the land tax, then recently repealed. To obtain a provisional valuation would take a year and during the following two years it might be possible to raise 350 millions of the estimated 500 millions, while the remaining 150 millions, would have to be spread in installments over a period of perhaps ten years in order to avoid financial disaster to particular individuals. On the other hand the existing excess-profits duty would, at the prevailing rate, yield in the course of the same three years twice as much as the 350 millions obtainable under the proposed war-wealth levy.

Another difficulty of the war-wealth levy would be that some property valuations had already partly declined or might ultimately vanish. Again the uncertainty in which every business man would be involved for at least one year and possibly for two, would unsettle his business and affect the banks from which he obtained credit. Finally the situation of England was improving and there was no need to take so radical a step. Sterling exchange had appreciated during the year, the British share of the Anglo-French loan had been met, and the debts to Japan and Argentina had been provided for. The internal debt would be reduced both in 1920 and 1921. The basic assumption of the proponents of the capital

levy and of the war-wealth levy, namely that the Exchequer would be unable to balance the budget and to meet the maturing external debts, failed of realization.[12]

K. The Capital Levy in France

i. *Theory*

The capital levy as a means of reducing or wiping out the war debt was discussed by economists as early as 1916. Prof. Arthur Girault of the University of Poitiers did not believe that a levy would be practicable because of the opposition of the wealthy and ruling class. In theory he supported the analogy between the conscription of lives and of wealth yet he doubted whether the political courage necessary after the war would equal the military courage displayed during the war.[13]

Just Haristoi, a financial authority, advocated the capital levy, either single or recurrent, in order to eliminate the inequalities of wealth produced by the war. However, he recognized the many difficulties and the need of long legislative preparation.[14]

An ultra-conservative view of the capital levy was presented by Francis Roger, embodying the same arguments that were advanced in Great Britain.[15]

The most complete study of the capital levy in France was made by Gaston Jèze, editor of the *Revue de Science et de Législation Financières,* in a series of articles in 1919. He presented the difference between repudiation and the capital levy and showed how, as a result of inflation, the war industries profiteered on both workmen and the state. In spite of the political and financial desirability of the capital levy, class prejudices are too strong to permit its introduction.[16]

[12] Monthly Review of the London City and Midland Bank, Ltd., June, 1920.

[13] Girault, Arthur, La Politique de la France Après la Guerre. Paris, Tenin, 1916. Allix, Edgard, Contra le prelèvement sur le capital, Revue Politique et Parlementaire, May 10, 1920, pp. 145-164.

[14] Haristoi, Just, Finances d'après-guerre et conscription des fortunes. Paris: Felix Alcan, 1918. Chapter II deals with the problem of the post-war budget, chapters IV and V with the amortization of the external and internal debt, and chapter IX with the conscription of wealth.

[15] Roger, Francis, Les Impôts sur le Capital. Paris: Marchal, 1918.

[16] Jèze, Gaston, L'impôt extraordinaire sur le capital, Revue, April, 1919. The theory, the pros and cons, and a review of the literature of

ii. *The Procedure*

Proposals for a capital levy date back to pre-war times. On January 15, 1914, M. Caillaux, then Minister of Finance, submitted a proposal for a tax on capital. However, the reason for this course was that an income tax was lacking in France and a tax on property was considered as a possible substitute. M. Magniaude of the Chamber of Deputies in 1916 submitted a proposal for a capital levy but it found no support. On February 28, 1918, another deputy, M. Albert Metin, former Minister of Public Works and former Under Secretary of State for Finances, proposed an annual tax on all capital graduated from 0.5 per cent to 2.5 per cent and payable out of income.[17]

After the armistice, the spirit of victory in France made it politically inexpedient to impose a capital levy. In the words of M. Klotz "This is not the moment to propose new charges. There probably will be new charges at all events but first, let Germany pay."[18]

The financial program of M. Klotz of February 19, 1919, provided for a capital levy. However, M. Ribot, former Minister of Finance opposed it as "impolitic, unrealizable and uneconomic" for it would become impossible to float further loans.[19]

In the Chamber of Deputies M. Peret likewise opposed it. As a result, M. Klotz abandoned the idea in his financial proposals of May 27, 1919. "In accordance with the interesting suggestion of M. Paul Doumer, the form of capital levy best suited to France is the inheritance tax, graduated according to the degree of relationship of the heirs."[20]

So long as the French electorate look forward to the payment of a huge indemnity by Germany, the capital levy and the war-

the capital levy in Great Britain, Germany, Italy, Austria, United States and France. The continuation in the July and October, 1919, and Jan. 1920 numbers deal with the French capital levy in detail.

[17] Documents Parlementaires, Annexe No. 4371.

[18] Journal Officiel, December 3, 1918, Chambre, p. 3236, and Sénat, p. 813. Jèze, Revue, 1919, p. 423.

[19] Sénat, Débats, March 5, 1919, p. 237 and Chambre, Débats, March 7, 1919, p. 1061. See also Liesse, André, Danger d'une taxe sur l'enrichessment en le presence d'une consolidation nécessaire de notre dette flottante. Economiste Français, March 27, 1920, pp. 385-7.

[20] Journal Officiel, Sénat, Débats, May 27, 1919. p. 829. Jèze, Revue, 1919, p. 444.

wealth levy will seem academic in France. However upon the realization that no one nation can pay the total war costs of its enemies, and that Germany's capacity for payment is limited, the need to balance the budget to reduce the debt and to eliminate the floating debt may yet compel France to enact a levy on capital or on war wealth.

L. Capital Levy in Germany

i. *The Discussion*

The discussion in Germany of the capital levy affords an interesting reflection of public opinion.[21]

(a) *In Favor of the Property Levy: Stresemann, Gothein, Bernhard, Beusch, Jaffé, Steinberg, Dub—*

The idea of a levy on property was made public and became the subject of discussion in connection with a statement of Herr Stresemann, a National-Liberal deputy in the Reichstag. Speaking on January 7, 1917, at a meeting of National-Liberals in Hanover, he said that "drastic levies on property would be necessary, including in their scope even small properties, and amounting to from a quarter to a third of their value."[22]

Herr Gothein, a deputy in the Reichstag and a member of the "Freisinnige" party, also defended the levy on property in an article in the "Hilfe" of January 25, 1917. He argued for "a single, drastic confiscation of property of every kind, exempting small properties and rising by a graduated scale on the larger properties." His conclusion nevertheless was: "It needs careful examination to determine whether the difficulties of assessment involved in an Imperial property tax of a confiscatory nature are so great that the plan must be abandoned. In spite of all the serious objections that may be raised against it, I think that the liquidation once for all of the greater part of the loss incurred by the German people as a result of the war is preferable to the endless nightmare of continued and oppressive taxation."

[21] Opinions for and against the levy on property, as summarized by Professor Diehl of Bonn University. From the Economic Journal, March, 1919. See also Jastrow, J. German Capital Levy. Quarterly Journal of Economics. xxxiv, p. 462, May, 1920. Jèze, Gaston. L'Impôt Extraordinaire sur le Capital, Revue de Science et de Législation Financières, 1919 and 1920.

[22] "Austriahungaricus," Einmalige Vermögensabgabe? Graz and Leipzig, 1917.

George Bernhard, editor of Plutus, expressed himself with greater reserve and scepticism on this extremely serious problem. He took the attitude that the levy is open to so many objections from the economic viewpoint, that if at all possible it ought to be avoided. The only means of avoiding it, however, would be a large war indemnity. Lacking this, Bernhard, too, holds that the property levy is necessary.

Paul Beusch entitles his essay "A Great Tithing." His proposal favors a single levy amounting to a tenth of all property. He thinks that in this way a sum of from 36 to 40 milliards would be obtained.

Edgar Jaffé likewise thinks that the economic disadvantages of permanent taxation at an oppressive level are so great that a capital levy is to be preferred. He emphasizes the importance of an Imperial Property Office, to be entrusted with the valuation and administration of such portions of property as could not be handed over to the state in the form of cash. "The right procedure would be, not to transfer the ownership of such properties to the state, but to allow them to remain in the possession of the taxpayers, managed by them for their own account and at their own risk, but burdened, for the benefit of the state with mortgages with high amortization quotas."

Julius Steinberg, a bank director, of Bonn, also admits the possibility "that later on a property levy of some magnitude might be collected in a single payment, such as would enable us to extinguish at a stroke a considerable part of our Imperial debt." But according to his view it is not admissible that this levy should even approximate the extent which its zealous partisans advocate and which has spread uneasiness among the propertied classes.

The idea of a levy on property passed from Germany to Austria, and here, too, as Dub tells us, it has been warmly defended after initial opposition.[28] He mentions the tax on capital introduced in Hungary as early as the spring of 1916, an annual tax of ½ per cent, levied on circulating capital, roughly equivalent, at present values, to a single exaction of 10 per cent.

(b) *Against the Property Levy: Mombert, "Austria-hungaricus," Heilbrunn, Konietzko, Friedberg—*

The economic arguments of Mombert against the property levy are based on the retarding influence of a property levy on the accumulation of new capital. Further he has an objection against the time chosen for the application of the levy on property. It would be dangerous to raise billions "at a time when the national economic life is in unusual need of recuperation, when every enterpreneur is striving to resume operations so far as possible on the same basis as before the war, when he is seeking credit to procure the necessary raw materials and to complete and renew his machinery of production,

[28]Dub, Oesterreich-Ungarns Volkswirtschaft im Weltkrieg. Sammlung von finanz- und volkswirtschaftlichen Zeitfragen, vol. XXXVI, 1917.

when production and consumption are being restored to their former equilibrium, and when in the interests of a restored national economy efforts are being made to build up again the old edifice of credit, so much of which has crumbled under the stress of war."[24]

The anonymous pamphlet "Einmalige Vermögensabgabe?" by "Austriahungaricus," is specially directed against Stresemann. The author contends that the property levy runs counter to the principle that taxation ought not to upset the economic situation. "A mortgage on property sounds feasible enough, but it should be remembered that the levy would affect many cases and that there would be an enormous strain on the mortgage market. As a consequence the rate of interest would rise considerably, to the discomfiture of the consumer."

Heilbrunn, another writer, has raised objections to the levy on property from the point of view of the accumulation of capital.[25] "The field available for direct Imperial taxation, namely property, can hardly yield sums of great magnitude, if the sources of new capital are not to be unduly tapped." He proposes a forced loan so that the burden of paying interest should be met by imposing upon property and the higher incomes the obligation of taking up bonds issued by the state, paying no interest, and redeemable at par by definite yearly quotas. "This obligation diminishes every year proportionately with the extinction of the war loans." It would mean that every person assessed would have to invest a percentage of his property each year, or a corresponding part of his income, in a redeemable state obligation bearing no interest. Though this plan has doubtless an advantage over the property levy in so far as it avoids a single heavy payment, it has a very serious drawback for it imposes on the taxpayer a very considerable, though yearly decreasing, burden of taxation, fixed beforehand for a long term of years, and remaining constant in spite of changes in property and income. A definite, relatively high tax is assessed, and lasts for decades. This is in contradiction to the principles of a rational fiscal policy, which should adapt a tax to continually changing economic conditions. Even a single levy admits of a greater or smaller burden being imposed according to the economic circustances of the individual.

Similar objections against the plan were put forward by Konietzko. In view of the impossibility of universal immediate payment, the state would allow time for payment, in cases of necessity, acting as a lender of the amount due, this being fixed by a single assessment to be made in 1918 or 1919. The amount itself and the interest on it would be paid off in instalments spread over thirty-six years. The state, it is claimed, would in this manner obtain the same result as if it received the whole amount at once. For the war loans would be covered and the burden of paying interest on them transferred to the taxpayer.[26] This plan is opposed by Konietzko on the following grounds: "An impost of this nature, fixed for thirty-six years on the basis of a single assessment, runs counter to all the principles of taxation. Every tax on property and income should be mobile. It should be subject to reassessment at regular intervals of relatively short duration, and the taxable capacity at the time should be taken

[24] Archiv fur Sozialwissenschaft und Sozialpolitik, vol. XLIII., part iii., p. 756

[25] Cf. the essay, Anleihen und Steuern, in the morning edition of the Berliner Tageblatt for June 2 and 3, 1917.

[26] Vermogensbeschlagnahme durch das Reich. In the weekly Mars, May 12, 1917.

into account. In the case of an impost to be paid without variation during a period of thirty-six years, no regard would be had to those changes of property and income which must inevitably take place in time of economic stress following the war. As a substitute, Konietzko proposes an Imperial property and income tax. With the prospective yield of the suggested levy on property as a basis, an Imperial income tax and supplementary property tax might be instituted on a scale to obtain from the taxpayer the same contribution as he would make under the scheme of deferred payment on a capital levy.

The scheme of a single property levy was very decisively rejected by deputy Friedberg of the National-Liberal party. "The state is to be the joint owner of estates and houses, the proprietor of shares in businesses! It does not receive from the majority of taxpayers a single penny in cash, and it burdens itself with responsibilities and administrative duties to which it is altogether unequal. The result must be that income, as well as capital, is reduced by a third, and the same injury is inflicted as if a 30 to 40 per cent income tax were imposed."[*]

ii. *The Laws*

(a) *Non-Recurrent Levy on Total Wealth*—

A series of drastic property taxes was enacted. The first law (July 26, 1918) imposed a tax of 0.1 per cent on values above mk. 100,000 up to 0.5 per cent on property valued over mk. 2,000,000. A non-recurrent levy on total wealth was put into effect on January 14, 1920. It was "a heavy tax on capital as a sacrifice to meet the financial needs of the country after the war." Persons, corporations, and accumulated fortunes were liable to taxation. The tax applied to the total capital as of December 31, 1919. The exemptions specified were household goods, property of less than mk. 5,000 per person, wife or child; as well as the property of states, municipalities, churches, universities, savings banks, insurance companies, the Reichsbank, charitable institutions, political parties, etc.

The severity of the tax was lessened for persons over 45 years of age whose property was less than mk. 150,000. Deductible items included tax arrears, debts, and annuities on account of poor health. Furthermore, a revised assessment of the tax was authorized up to December 31, 1922, if the taxpayer's property decreased by more than one-fifth. War loans were accepted in payment at par until December 31, 1920. Taxpayers who settled in cash received a preferential discount of 4 to 8 per cent. How-

[*]Die Abbürdung von Kriegsschulden. In the semi-monthly Deutsche Stimme of Jan. 25, 1917, p.39.

ever, installment payments were provided for covering a period of 32 to 50 years, upon the payment of 5 per cent interest and 1½ per cent amortization per annum. Taxpayers whose property did not exceed mk. 100,000 and annual income, mk. 5,000 were entitled to deferred payment without interest. The payment of the tax became due on the death of the taxpayer.

The rates of taxation ranged from 10 per cent on the first mk. 30,000 of taxable property up to 65 per cent as an upper limit. A few typical cases are given herewith:

Total property * Marks	Amount of levy Marks	Per cent
6,000	100	1.7
10,000	500	5.0
20,000	1,500	7.5
50,000	4,500	9.0
100,000	10,400	10.4
500,000	89,750	17.9
1,000,000	244,250	24.4
5,000,000	2,268,250	45.4
10,000,000	5,417,750	54.2
50,000,000	31,417,750	62.8
100,000,000	63,917,750	63.9

* Including the exempt mk. 5000.

The provisions for postponed payment make this capital levy virtually payable out of income.

(b) *The Non-Recurrent Levy on War-Time Increases of Wealth*—

This tax, applying to the increase of property of individuals, took effect on September 26, 1919. The taxable amount was the difference between property assessment under the property tax of July 3, 1913, and an assessment on June 30, 1919. The law exempted property under mk. 10,000 and all property increases under mk. 5,000. Taxpayers were permitted to deduct from the recent assessment, inheritances received, insurance and annuity payments, gifts, proceeds from the sale of foreign property, the income tax for 1919, and arrears of taxes for 1919 and 1918. The recent assessment had to include donations made, investments in foreign securities, purchases of precious metals, works of art or other

objects of great value. The rate of taxation began at 10 per cent for the first mk. 10,000 of increased property and continued upward on a sliding scale for additional increases, up to 100 per cent for all increases over mk. 375,000. War loans were accepted at par in payment of the tax.

The provisions for paying the emergency levy in installments defeated the object of the levy, which was to retire immediately a large part of the debt. After the enactment of the measure, inflation continued and property values rose. Since the levy was based on assessments as of December 31, 1919, the amounts payable became a decreasing fraction of the subsequently inflated values and could retire a smaller portion of the debt than was expected. Further, budget expenses rose. As a result, the returns on the capital levy were applied not to the reduction of the debt but to meet current needs. To correct the difficulty it was proposed to issue a forced loan or to accelerate the payments under the emergency levy.

M. Capital Levy in Other Countries

A tax upon the increase in capital, payable by individuals at rates graduated from 10 to 80 per cent, was enacted in Italy. In addition to this war-wealth levy, a tax on pre-war capital was put into effect. It applied to individuals with fortunes above 50,000 lire. The rates were graduated from 5 to 25 per cent. These taxes were payable in installment over a period of 10 to 20 years, and were adopted in lieu of the forced loan which was proposed.[28] According to the returns of the first annual installment under the Italian capital levy the original estimates were not realized. Instead of 620,000 individuals liable to the tax only 361,000 filed returns. The wealth subject to the tax was estimated

[28] For further discussion see Einaudi, Luigi, Taxes on Property Increments in Italy. Quarterly Journal of Economics, XXXV: 1 November, 1920.

Gini, C., Levy on Capital: the Italian law, Economic Journal XXX: 119, September, 1920.

Revue de Science et de Législation de Financières XXVIII: 3 p. 507 third quarter, 1920.

The full text of the law is given in the British Board of Trade Journal, June 10, 1920, pp. 271–272.

London Economist, August 21, 1920, p. 300. On page 256 of the same issue the proposal for a forced loan is discussed.

at 138,000 million lire but only half the sum seemed to be liable. As a result, the annual yield of the levy was only 450 million lire as compared with an estimate of 783 million lire.[29]

A capital levy was also put into effect in Austria and Czecho-Slovakia.

Forced loans were enacted in Holland in 1920 and discussed in Australia during 1919, and in Germany and Denmark during 1920.

[29] Report of A. A. Osborne, Rome, Commerce Reports, Nov. 20, 1920.

CHAPTER XIV

NATIONAL BANKRUPTCIES IN THE NINETEENTH CENTURY[1]

The huge debts piled up by the belligerents are in most cases greatly beyond their ability to pay, particularly if deflation should occur and the purchasing power of the paper money should rise toward pre-war levels. Undoubtedly, the former belligerents in Europe, with the exception of England, will have serious financial difficulties for some time to come. It is too early to predict the extent or nature of the defaults which will occur in the countries of Europe. It will not, however, be amiss to review briefly the causes and effects of national bankruptcies in the past.

A. The Nature of National Bankruptcies

Practically no states are free from debt, and there are very few states whose financial history is free from bankruptcy. From 1820 to 1875 securities of 48 countries, amounting to 613 millions sterling, were traded in on the London Stock Exchange. Of this total 157 millions sterling were involved in unqualified bankruptcy, 175 millions sterling in partial bankruptcy, and only 281 millions sterling, or about 46 per cent, had a record of punctual payments of principal and interest. Omitting cases that bordered on bankruptcy, instances of clear and unquestioned bankruptcies in the 19th century were numerous, as follows: Spain, 1820, 1831, 1834, 1851, 1867, 1872, and 1882; Austria, 1802, 1805, 1811, 1816, 1868; Germany, 1807, 1812, 1813, 1814, 1850; Turkey, 1875, 1876, 1881; Portugal, 1837, 1852, 1892; Greece, 1826 and 1893; Egypt, 1876; Russia, 1839; Holland, 1814. The bankruptcies in South America are almost too numerous to mention and even in the United States 12 states defaulted on their debts.

[1] This chapter is based in large part on Manes, Albert, Staatsbankrotte, Berlin: Karl Siegismund, 1919, and annual reports of the Council of Foreign Bondholders. The references for further study are chiefly from Manes.

At the beginning of 1916 loans of 61 countries, then or formerly independent, were listed on the London Stock Exchange. Of these 35 met their obligations faithfully, and 26 failed in some form or other to do so; 11 political entities defaulted in part only. They were Bahia, Brazil, Buenos Aires, Colombia, Liberia, Nicaragua, Para, Paraguay, Peru, Salvador and Uruguay; 15 political entities completely failed to pay either interest, amortization, or principal, Honduras since 1873, Mexico since 1914, Ecuador since 1914, Montenegro since 1914, San Luis Potosi since 1914, Corrientes (Argentina) since 1915, and nine of the Confederate states for over half a century.[1a]

There are differences between public and private credit and between public and private bankruptcy. Private credit is granted on the assumption, that in case of dispute or default, the creditor may have recourse to a court of law, and ultimately the right to seize the property of the debtor in order to satisfy his claim. But neither assumption holds in public loans. In private credit, loans are relatively short term and therefore the important consideration is the ability of the debtor to repay the principal. The assets must be ample. Public loans on the other hand are of relatively long term and the deciding factor with the creditors is the ability of the debtor to pay the interest. Revenues must be adequate. In private loans the lenders make the terms, the use to which the funds are to be put must be stated by the borrowers, the lenders frequently are represented on the board of directors and control the disposition of the monies, and changes of management or administration do not affect the debt. In private credit the circumstances of the borrower, his assets and income, and the specific security are the deciding considerations. But public credit depends on the tax rate, the form of wealth, whether in land or securities, the state of the budget, the debt, the likelihood of peace, social and industrial stability, as well as political interest, such as friendship for an ally or hostility toward a political and commercial rival. Natural resources are of value in supporting credit only if they are productive.

Correspondingly there are important differences between public and private bankruptcy. An individual is bankrupt when he can-

[1a] For details see introduction to Report of Council of Foreign Bondholders for 1916.

not pay. A country is bankrupt when it will not pay. The individual is declared bankrupt by a court, but the state itself decides when it is bankrupt. Individual bankruptcy usually ruins the debtor. State bankruptcy on the other hand frequently means, not the ruin, but the renaissance of the country. In fact, most states have been bankrupt at one time or other. Yet their credit revived and before the World War stood higher than private or industrial credit. There is a remarkable uniformity of definition of national bankruptcy. According to leading authorities, national bankruptcy is defined as a partial or complete, open or secret, breach of the rights of creditors due to the inability or lack of desire of debtors to meet their unquestioned legal obligations.[2]

Foreign loans were made as early as the seventeenth century by Great Britain, France and Holland. But up to the period of the industrial revolution capital was invested internally chiefly.[3] In the nineteenth century and more particularly in the twentieth century capital became more international and foreign loans became common. The World War extended this international tendency and within both groups of powers very large advances were made by the richer governments. At the end of the war the belligerent governments were bound to each other by a network of extensive loans.

After the beginning of the nineteenth century there was an increase in national indebtedness incurred for productive purposes such as transportation. Simultaneously, national bankruptcies increased. Although the bankruptcies of the nineteenth century were public, rather than secret or disguised, foreign creditors were frequently defrauded or discriminated against by divers subterfuges. The states of Southeastern Europe represent stages of development, which are intermediate between primitive and modern methods of public finance, and which middle and western Europe had attained centuries before. A veritable clinic of pathological financial cases is presented in the states of southeastern Europe, including financial

[2] Van Daehne van Varick, Le droit financier international, Haag, 1907, p. 4. Pflug, Staatsbankrott unter internationalem Recht, Munich, 1898, p. 1. Collas, Der Staatsbankrott und seine Abwicklung, 68. Stuck der Munchener volkswirtschaftlichen Studien, Stuttgart, 1904, p. 5. Waurin, Essai sur les emprunts d'Etats, Genf, 1907, pp. 61–62. v. Heckel, Lehrbuch der Finanzwissenschaft, Leipzig, 1911, p. 450.

[3] Sombart, Der moderne Kapitalismus, 1917, 2d Edition, vol. II, Part II, p. 1044.

impoverishment, breach of faith, and deception of creditors.[4] The states of South and Central America likewise afford examples of chronic bankruptcy. For example Colombia experienced almost every form of bankruptcy, including suspension and cessation of payment of interest and principal, composition with creditors, change of terms of previous settlements, and so on, all in the space of less than 100 years. From 1820 to 1916 Colombia announced its bankruptcy 13 times.

Bankruptcies usually are a sequel to fundamental political changes. In 1867 Hungary repudiated the debt contracted under the previous regime. Prussia went through national bankruptcy several times, as a result of political changes. The establishment of Italy was followed by an extensive bankruptcy. The Republic of Mexico repudiated the debt contracted under Maximilian and the imperial regime. The Argentina state, La Plata, repudiated its debt as a result of a change in its political relations. Of the succession states of the old Austrian Empire, Jugoslavia and Czecho-Slovakia are attempting to repudiate their share of the national debt. These examples illustrate the fact that new governments attempt to get rid of old obligations and to clear up their old finances by means of bankruptcy, which in frequent cases is merely the recognition of an established fact.

B. Types of National Bankruptcies

Bankruptcy involves the impairment of the obligation to pay interest, or principal, or both. Manes classifies the types of bankruptcy according to the following scheme:

1. Default on interest:
   a. Reduction of the rate
   b. Postponement of payment
   c. Cessation of payment
   d. Special taxes on interest paid
2. Default on principal:
   a. Postponement of payment
   b. Conversion into other forms of debt or forced conversion
   c. Reduction of the principal
   d. Conversion of a gold debt into a paper debt

[4] Politis, Les Emprunts d'Etat en droit international, Paris, 1884, p. 1. Gustav Cohn, Finanzwissenschaft. Stuttgart: 1889.

3. Simultaneous default on both principal and interest
   a. Reduction of both
   b. Repudiation

In addition to the above types, bankruptcies may be further classified with respect to the discrimination between creditors, such as native or foreign, rich or poor, and with respect to the impairment of pledges or collateral.

i. *Default on Interest*

(a) *Reduction of the Rate of Interest—*

For a long time after 1873 Greece paid only 30 per cent of the face value of the interest coupons on her debt. Portugal compelled her creditors after 1841 to accept a reduction in the rate of interest from 4 per cent to 2½ per cent. As a result of the Turkish bankruptcy of 1875 the government paid one-half of the interest in cash and the other half in scrip, payable six years later. However, by 1876 Turkey defaulted even on the partial payments.

(b) *Deferment of Payment—*

History records numerous cases of the cessation of payment of interest, temporarily or permanently, to permit national recuperation after a war or other political disturbances. In 1820, 1834, 1854, and 1867 Spanish bankruptcies took the form of cessation of payment of interest, which was resumed only when new loans had to be incurred. By legislation in 1834 one-third of the interest on the debt was declared void and the remaining two-thirds was, by a forced conversion, paid in new bonds. Prussia suspended interest payments on external loans from 1806 to 1811 and on internal loans from 1806 to 1814. Greece suspended payment of interest for half a century after 1827. The records of Argentina, Mexico, Salvador, Guatamala and Ecuador show similar deferment and cessation of interest payments. The postponement of interest payments is really not a form of bankruptcy but a sort of moratorium, particularly if the state makes good on its default.

(c) *Taxes on Interest—*

A tax on interest coupons is not a disguised form of bankruptcy unless such a tax is levied on specific issues,[8] in which event it

[8] Von Heckel, Finanzwissenschaft, vol. II, p. 453.

has the effect of a reduction of the rate of interest or a forced conversion into a lower rate. The taxation of interest coupons is frequently resorted to in spite of undertakings at the time of issue not to tax interest payments. In 1868 Austria levied a 16 per cent tax on the interest of its bonds and thus reduced the rate from 5 per cent to 4.2 per cent. In 1882 Spain issued a 4-per cent, tax-exempt loan, but after the Spanish-American War, the interest on this loan was subject to a 20 per cent tax if held internally. In 1855 Russia introduced a coupon tax of 5 per cent on both domestic and foreign holders of her bonds. In 1894 Italy raised the existing tax on interest coupons by 50 per cent. These cases afford historic precedents for the countries of Europe and undoubtedly during their reconstruction they will utilize this method of reducing the annual charges.

ii. *Default on Principal*

(a) *Postponement of Payment*—

In the past hard-pressed governments have diverted funds reserved for the retirement of the debt with the result that the repayment of the principal was postponed. Such was the case in France in 1770 under Louis XV. Terray, Minister of Finance, was unable to balance his budget and therefore applied sinking-fund installments against current expenses. Numerous cases of this form of bankruptcy are recorded in the history of South American public finance. In fact, suspension of the payment of interest is usually accompanied by the failure to make annual provision for the sinking of the loan.[6]

(b) *Conversion of Principal*—

Conversion into securities bearing lower rates of interest, or into less desirable forms of securities may be effected with or without the consent of the bondholders. The right to convert its bonds into lower interest-bearing securities is regarded as an indefeasible right of governments even though many bonds contain a clause forfeiting this right for a period of years. The examples of forced conversion are numerous during the nineteenth century. The Egyptian national debt prior to 1830 ranged from 7 to 9 per cent, and as a result of a forced conversion the rate was reduced to

[6] Manes, 2nd edition, *ibid.*, p. 47.

range from 4 to 5 per cent. Servia similarly reduced the interest on her 5 per cent rentes to 4 per cent. In cases of forced conversion, the holder has no choice but to accept.[7]

(c) *Reduction of the Principal*—

A classic example of the reduction of the principal is the case of the French Directory which in 1797 reduced the outstanding debt to one-third of its total and for the remaining two-thirds holders received notes which were accepted in the purchase of the state lands. The example of France was followed in Holland and in Westphalia.

(d) *Conversion of a Gold Debt into a Paper Debt*—

The depreciation of the currency, as a form of national bankruptcy, was practiced even in ancient Rome. In modern times instead of debasing the coinage, governments replace it by paper. In 1893 the amount of the state bonds of Greece was thus reduced by 70 per cent and in 1899 by the same process the amount of the Portuguese bonds was reduced by 66⅔ per cent. Both the Portuguese and the Greek bankruptcies affected chiefly foreign creditors. But in 1839 the analogous Russian bankruptcy involved only Russians.

iii. *Native* vs. *Foreign Creditors*

The debts left as a legacy of the World War involve internal and external debts, war loans as well as pre-war and post-war loans. The term "repudiation of national debts" was first applied to the repudiation of Mississippi in 1841, as a result of the cotton crisis of 1839. Repudiation was frequently repeated thereafter, particularly among the southern states. The popular disinclination to pay taxes to retire foreign loans gave political support to this policy. Attempts to justify repudiation were based on the ground that the loans were contracted in an illegal manner or that the law which authorized the incurring of the debt was unconstitutional, or if the law was valid that the conditions had changed.[8] The repudiation of debts always operates to the disadvantage of foreign holders, for the failure to pay interest reduces the tax

[7] Korner, Die Köversion öffentlicher Schulden, 1893. Freund, Rechtsverhaltnisse öffentlicher Anleihen, Berlin, 1905, p. 221.

[8] Scott, Wm. A., The Repudiation of State Debts. New York, 1893.

burden of the domestic creditors. Discrimination in favor of the foreign borrower was practiced by Prussia, which resumed payment on the foreign debt in 1811, several years before the interest on the internal debt was again paid. As a result of the World War a new era in the history of national bankruptcy has opened. The pre-war prediction that financial exhaustion would limit the duration and the scope of the World War was not verified. However, it is hardly likely that the nations which are carrying such enormous burdens can escape some form of bankruptcy. The different treatment of internal and external bonds or of domestic and foreign holders involves much difficulty, for in the case of most of the belligerents internal loans were offered abroad and in many cases nationals of a country have bought its external loans. Again, external loans in many cases call for payment in gold or in the currency of the foreigner. But internal loans are not so restricted, either by the terms of the bond or by public opinion. However, in the past the stamping of bonds or the filing of affidavits as to the date of acquisition or ownership did afford means of carrying out these distinctions.

C. Consequences and Liquidation of National Bankruptcy

i. *Results of National Bankruptcies*

National bankruptcy results temporarily in acute misery. Of course the worst sufferers are the holders of government bonds, particularly the poor people, who have put into them their meager savings. National bankruptcy is followed by deflation, unemployment and an obstruction of industrial production. Private bankruptcy usually is widespread, for banks and large corporations holding government securities are suddenly deprived of a large share of their assets. Investors, "widows and orphans," and institutions such as insurance companies and savings banks with income from state securities suffer. But those who do not own state securities gain relatively—the bond slackers, the hoarders of gold, the owners of non-government securities or foreign securities particularly, and the unpropertied classes.

The Austrian bankruptcy in 1811 reduced to beggary those that lived on fixed incomes and made the formerly wealthy investors

feel the pangs of hunger. The government official dependent upon his salary was reduced beneath the level of the laborer, and was hardly able to keep from starving. The military class which was fed and clothed by the state was envied. But suicide, despair, and misery were soon forgotten, profiteering was ended, and the continued existence of the state was assured.[9]

National bankruptcy is usually followed by an industrial revival. The demoralizing effect of depreciating paper is ended. The debt charges are decreased and taxes may be lightened. The bankruptcy at the time of the French Revolution restored the finances of France to soundness, improved her exchange, revived her industry, and made it possible for her to renew the war against England. The nationals of the bankrupt state benefit by the losses of foreign creditors. However, the advantage gained by defrauding foreign bondholders is offset by the decline in the credit of the state. Finally, if the foreign debt is a large proportion of the total debt and is held in several countries, national bankruptcy may result in international complications.

ii. *Liquidation of National Bankruptcy*

In liquidating its debts, a bankrupt state may resort to repudiation, that is, unqualified refusal to pay either interest or principal. Again, it may effect partial restitution through the deferred payment of interest and principal. Finally, the creditors may compel a composition and the part payment of the debt. An individual bankrupt may be compelled by law to make an equitable liquidation of the claims against him. But a state cannot be so compelled. Furthermore, its bonds usually are negotiated so that the investors who bore the original loss cannot be indemnified. However, there have been several cases in which states have attempted to make a just settlement on their defaulted obligations. In 1814 Holland made complete restitution of the one-third of the debt which had been in default. In 1818 Austria in order to resume the interest payments in default at the original rate, issued a premium loan, whereby the interest was repaid at the time that the bonds were drawn. Argentina in 1857 attempted to compensate for its failure to pay interest by obligating itself to sink the debt at a progressive

[9] Bergius, Grundsätze der Finanzwissenschaft, Berlin, 1877, 2d Edition, p. 635. Strassny, Zum österrischen Staatsbankrott von 1811, p. 50.

rate. In 1855, after defaulting on interest for about 20 years, Ecuador offered to liquidate the arrears by means of a funded debt.

Of course, in most cases the difficulty of getting new credit is not entirely dependent upon the liquidation of an existing bankruptcy. For public credit differs from private credit in that it is difficult to destroy. A new generation may restore the impaired credit of a state.

D. Protection of Foreign Creditors

With the increase in international loans, means for the protection of foreign creditors have been developed, including measures of prudence in contracting the loan and legal or military measures for enforcing its payment. These measures include guarantees, military intervention, the formation of protective committees, foreign financial control, and an appeal to an international judicial court.

i. *Guarantees*

Impliedly every state guarantees its loans. In addition Holland expressly covenants with its foreign creditors that "the obligations of the state toward its creditors are guaranteed." Spain likewise provides that "the public debt is placed under the special protection of the nation." The receipts from taxes and monopolies constitute security for the payment of interest and amortization. Originally, in the early periods of public borrowing, specific security was pledged. Until 1900 Prussia offered the crown lands as collateral for public loans. Later, only general security was offered, and the strong states pledged nothing but their word. Before the war no great power gave any tangible security. During the war Great Britain and France pledged their holdings of American and neutral securities as collateral for loans in the United States. The lesser power frequently pledged specific assets or revenues such as customs duties, tax revenue, income from monopolies, railroads, ports, etc. Such pledges were offered by Greece in 1887 and 1898, by Servia in 1884 and 1885, by Turkey in 1881, 1885 and 1888, by Egypt in 1876, 1877, 1878 and 1885, and by Mexico in 1890. In the case of the Egyptian loan six European powers guaranteed payment to the creditors. The most striking example of a state guarantee is the pledge by Turkey for successive loans of her general revenues, a tribute from Egypt, the customs receipts of

Smyrna and Syria and of Constantinople. After these had been exhausted Turkey offered among other possible sources of revenue the income from the monopoly of tobacco and salt, from the post-office and from concessions. The Sultan of Morocco, in 1907, borrowed money in Paris and London by pawning his jewels, the treasures of his palace, and his crown lands.

Several dollar loans of South American countries, floated in New York in 1920 and 1921 were secured by pledge of specific revenues. Holders of dollar loans of Belgium and Denmark had the privilege of sharing pro-rata in any future liens if pledged.

Secured creditors are not affected by the bankruptcy of the debtor, for example in the bankruptcy of Turkey in 1881 and of Portugal in 1892, the creditors remained secured in their rights. During the liquidation of the Egyptian state loans in 1880, three classes of state creditors were recognized, the holders of mortgages, the holders of other pledges, and the unsecured creditors. The Greek loan of 1833 was guaranteed by England, France and Russian and from the default of Greece until 1871 the guarantors repurchased bonds in the hands of investors. An unusual protection of the interests of foreign creditors was put into effect in the Servian 5-per cent loan of 1888, which stipulates that a special fund for the retirement of the bonds, based on the business tax, shall be administered under the dual control of a representative of the government and of the holders, and that adequate income from the specifically pledged tax shall be allocated by them jointly to the loan. A similar condition is included in the 5-per cent gold bonds of the Servian Agricultural Credit Institute. Such conditions prejudice the rights of the holders of old loans, and it is questionable whether the state has the right to give special security to new holders.

ii. *Intervention*

The intercession of states to protect their nationals, who are creditors of a defaulting state, was frequent, even in the eighteenth century. In 1848 Lord Palmerston, the British Secretary of Foreign Affairs, in a statement to British diplomatic representatives in foreign countries, made an important declaration of policy. With reference to the claims of British subjects against any state "it is entirely a question of discretion with the British government and by no means a question of international right whether they should or should not make the claims a matter of diplomatic nego-

tiation. For the British government has considered that the losses of imprudent men, who have placed mistaken confidence in the faith of foreign government, would prove a salutary warning to others, and would prevent any other foreign loan from being raised in Great Britain, except by governments of known good faith and of ascertained solvency. But, nevertheless, non-payment of interest upon loans made by British subjects to foreign governments might become so great, that it might become the duty of the British government to make these matters the subject of diplomatic negotiation." This ambiguous note was interpreted both in favor of and in opposition to intervention. A clearer statement on intervention was made in 1871 by Lord Granville, Secretary for Foreign Affairs, in a letter to the Secretary of the Council for the Foreign Bondholders, to the effect that "Her Majesty's government will be at all times ready to give their unofficial support to bondholders in the prosecution of their claims against defaulting states. But the party must not expect that forcible measures, such as reprisals and still less any of a more warlike character, will ever be resorted to by Her Majesty's government in support of their claims."[10] A select committee of the House of Commons appointed to look into the matter, reported (July 29, 1875) in favor of greater publicity rather than of intervention. Finally, Premier Campbell-Bannerman (February 17, 1903) at the time of the intervention in Venezuela, took the stand that foreign capitalists investing in Venezuela knew the risks involved, but expected big profits, and therefore they could not expect that the government would support incautious and inexperienced capitalists in every foreign venture.

The French government, on the other hand, was active in supporting the foreign investments of its nationals. In 1869 France intervened in Tunis to satisfy French creditors. She attempted to intervene in Mexico in 1861, in violation of the Monroe Doctrine, and was opposed by the United States. In 1894 France threatened to break off diplomatic relations with Portugal if the rights of French creditors were not respected. For seven years a breach of diplomatic relations between France and Venezuela was maintained, because French creditors had been defrauded. Yet as far back as 1823 a royal decree was issued in

[10] Fillimore, Commentaries Upon International Law. London: 1882, p. 13.

opposition to government intervention to collect private debts. Other measures were put into effect in France. The Minister of Foreign Affairs since 1889 has influenced the issue of foreign securities. For instance, Hungarian and German loans were politically objectionable and in 1911 plans for underwriting them were abandoned by French bankers. In the same year members of the Chamber of Deputies objected to the issue of a new Paraguayan loan until the old had been paid. The French government paid interest in default on Russian bonds from the time of the Bolshevik Revolution until January 1, 1921. The refusal to trade with Soviet Russian was based on its repudiation of debts of the Czarist regime.

In the nineteenth century intervention was practiced by the great powers against small powers but never against equals. Apparently, there is a presumption of ulterior motives. The right to intervene is not admitted, or else is restricted to very narrow limits, such as for example when internal creditors are favored as against external creditors. Neither citizens of a state nor alien creditors have any recourse to law in cases of national bankruptcy. The French attempt to bring delinquent foreign debtors before a French court failed. Intervention by the state of which the creditors are nationals is justified as little in the case of a foreign debtor state as in the case of a foreign private debtor. Intervention by one foreign state abridges the rights of the creditor nationals of other foreign states. External creditors have no superior claims over internal creditors. The only safeguards for the investor are the examination of the risks and the responsibility of the banker who recommends the foreign securities. The rate of interest and other terms of the loan are fixed after investigating the financial conditions of the foreign borrowing state. Although intervention is a questionable right at best, guarantor states may justifiably intervene because the guaranteed state in default surrendered its sovereignty upon the acceptance of the guarantee. Short of military force there are few effective means of intervention. Protests are ineffective. Exclusion from the stock exchange is hardly less so. Tariff discriminations lead to reprisals. The cessation of diplomatic relations by the government of the creditors may prove a boomerang, because rival nations profit. The arrest of persons, the seizure of property, blockade, the landing of troops may all be interpreted as acts of war, and the results may be worse than the loss of funds of the debtor.

iii. *Protective Committees*

Voluntary organizations for the purpose of protecting foreign creditors are rather recent. In form they are both temporary and permanent. The London Corporation of Foreign Bondholders was established in 1868, as a private organization. It was reorganized in 1898 and the government was given representatation on its board. Of the seven members annually replaced two are appointed by London bankers, three by the original private council of foreign bondholders, which preceded the Corporation, and two by the Board of Trade. The Corporation represents the interest of creditors in debtor states, and represents creditors holding over 1000 million pounds sterling of foreign obligations. A committee is formed for each security admitted and annual reports are issued covering each one.

In France a body similar to the London Corporation was formed. The *Association Nationale des Porteurs des Valeurs Etrangers,* of Paris, was created in 1898 by members of the Paris Stock Exchange with the support of the French Ministry of Finance. In 1913 the name was changed to Office National des Valeurs Mobilières and the scope of the organization was extended to include, not only French creditors, but all creditors, and not only external securities, but even internal loans bought by other than the nationals of the issuing country. Like the London Corporation, the French body issues an annual review of the finances of the defaulting states.

In 1899 a temporary protective committee for the holders of Spanish internal loans was formed in Germany. Its functions were subsequently taken over by a permanent body, called *Deutsche Treuhand Gesellschaft.* This body is a voluntary organization and looks after only such cases as are entrusted to it. Plans for an international association of protective committees were put forward by the president of the French committee. An international agreement between these protective committees would make it possible to compel delinquent states to live up to their obligations. Uniform international rules for admission of state loans to the stock exchanges of the several countries might be the means for effecting payment.

iv. *International Financial Control*

International financial control of weak states was established during the past century in the case of Greece, Turkey and Egypt. The first case of international financial control was that of Tunis, which ceased to pay interest on the national debt. In 1869 Prussia, France, England, and Italy undertook supervision of the finances of Tunis, and after a composition with the creditors, control was abandoned in 1899. Similar international supervision was set up in 1876 over Egypt by Germany, France, Great Britain, Italy, and Austria-Hungary. The Khedive proclaimed the decree of which the important provisions follow: A liquidation commission was set up and recognized. It was to determine which of the financial revenues should be put at the disposal of the holders of the national debt. All sums collected above this amount were to revert to the Egyptian government. The commission was to be dissolved after the final settlement. International control was also established over Greece. Under the Monroe Doctrine the United States took control of the finances of Santo Domingo, to prevent European countries from doing so.

v. *International Court*

International coöperation in the regulation of foreign loans dates back about a generation. The International Statistical Institute in the 90's investigated the question of foreign loans, showed the extent to which foreign states did not live up to their obligations, and recommended measures to prevent further default. An international congress on securities met in Paris in 1900 but did not attain any practical result. An international court for settling disputes due to bankruptcies was suggested in 1875 at the Congress for the Reform of International Law. At the Berne Peace Conference of 1902 a proposal was made that loans to foreign states contain a clause whereby the borrowing state would agree to abide by the decision of a judicial body to be created. However, no practical result came of it. Seventeen American countries signed an agreement in Mexico in 1902 for the adjudication of disputes arising out of financial claims. This agreement was renewed at the Third Pan-American Congress in Rio de Janeiro in 1906, and extended through 1912. At the First Hague Conference in 1899,

the question of the adjustment of international financial claims arose, but as a result of the reservations concerning national honor and vital interests the conference achieved no result in this field. The Second Hague Conference, convened in 1907, was more effective. After some discussion, a proposal was accepted, which provided among other things that the contracting powers agreed to refrain from the use of force for the collection of contractual debts, unless the debtor refused an offer of arbitration, or else did not carry it out. An international court might settle questions concerning the amount of the debt, the origin of the claim and the time and mode of payment. In other words a debtor might invoke legal proceedings and thus limit the use of force by the creditors. The Hague Agreement of 1907 to limit the use of force in the collection of international debts was not signed by Germany and signed with reservations by the United States. The defect of the Hague Agreement was that it did not provide for the execution of the decisions of the Hague Court. Therefore the last resort of a defrauded creditor was the use of military force. During the very sessions of the Hague Conference at which Venezuela offered proposals to limit intervention, she refused to repay a loan of 10 million francs which she owed to Belgium.

The Covenant of the League of Nations provides both for a court and for the enforcement of its decisions. In view of the fact that many bankruptcies are inevitable after the World War, the laws governing international finance must be developed and provision made for the adjudication of the many questions resulting from the extensive inter-governmental loans, contracted during the war.

CHAPTER XV

THE INTER-ALLIED DEBTS—SHALL THEY BE CANCELED?

A. Historic Experience

Publicists in several countries of Europe have advocated that the United States government should cancel the war debt that the Allies owe to it. As a precedent for this procedure, it is said that England canceled the indebtedness of her allies after the Napoleonic wars.

The parallel is not an exact one. The total advanced in loans, subsidies or otherwise to states allied with England in the Napoleonic wars was £57,153,819. These advances were made to Portugal, Russia, Spain, Austria and the German states from 1793 to 1817.[1] The total amount loaned to Austria from 1794 onward was about £6,000,000, and claims against her were pressed by Great Britain for seven years after the close of the war. Austria refused to pay, offering various excuses. On November 17, 1823, twenty-nine years after she obtained her first loan, Austria, after much haggling, agreed to pay into the British treasury in full settlement of her debt, £2,500,000, about 42 per cent of the principal, or 11 per cent of the principal and interest. She effected the settlement by borrowing the amount from private bankers, the Barings and Rothschilds.[2]

What are the differences between the inter-Allied debts after the Napoleonic wars and after the World War? In the Napoleonic wars the main quarrel was between Great Britain and France; in the World War the main quarrel certainly was not between the United States and Germany. It concerned the United States directly less than any of the European powers. In the Napoleonic wars Great Britain by subsidies induced her

[1] Levi, Leone, History of British Commerce. London: John Murray, 1872, p. 99. For details as to foreign loans and subsidies see Porter, Progress of the Nation, vol. II, p. 335.

[2] Barker, J. Ellis, The Nineteenth Century, Aug, 1919, p. 382.

allies to join her; in the World War the United States was urged to enter by the powers to whom she made loans. One hundred years ago it was still the custom to hire mercenary troops; in the World War there were none. During the Napoleonic wars Great Britain advanced subsidies in part to her allies; these were not intended to be repaid. During the World War the advances by the United States government were regarded as loans, for which the borrowers gave their formal obligations.

But the relative size of the debts constitutes the clearest distinction between the two wars. Including taxes raised the total cost to England of the 23 years of war with France was under £1200 million. The total debt before the Napoleonic wars was £244 million and after them £885 million. The increase of the debt due to the wars was £641 million.[3] Loans and subsidies to foreign powers amounted to about £57 million, or 8.9 per cent of the total war debt. The total military and civil expenditures during the 23 years amounted to £1117 million and the net military expenses to £950 million. The loans and subsidies to foreign powers constituted 6.0 per cent of the military expenses.

What are the analogous figures for the World War? The pre-war debt of the United States was 1208 million dollars. In August, 1919, the debt was at its maximum, or 26,597 million dollars.[4] The war debt was therefore 25,389 million dollars. On November 15, 1920, according to the report of the Secretary of the Treasury, the total loans to the Allies were 10,813 million dollars, consisting of net cash advances, less repayments, of 9466 million dollars, unpaid interest of 700 million dollars, surplus supplies sold on credit by the War Department of 563 million dollars, and advances for relief of 84 million dollars. The advances to foreign governments by the United States during the World War constituted 43.0 per cent of its total war debt, as contrasted with 8.9 per cent, the British figure for the Napoleonic wars. The net cost to the United States of the World War was 33,455 million dollars.[5] Advances to foreign governments by the United States during the World War constituted 32.6 per cent of the total war cost, in contrast with 6.0 per cent, the corresponding British figure in the Napoleonic wars.

[3] Bastable, C. F., Public Finance. Hirst, F. W., Credit of the Nations. Hamilton, Robert, An Inquiry Into the Public Debt.

[4] Report of the Secretary of the Treasury, 1920, p. 23.

[5] Treasury report, *idem*, p. 105.

The ratio of British advances to total war debt in the Napoleonic wars was about one-fifth of the ratio of the United States advances to her total war debt in the World War. But Great Britain pressed for repayment and secured partial reimbursement seven years after the close of the Napoleonic wars.

Those who attempt to justify the inordinate indemnity imposed upon Germany find no parallel in the post-Napoleonic period. The indemnity imposed upon France after the Napoleonic wars was only £28 million. Yet the debt of victorious England in 1817 was £848 million and the national debt of France was only £140 million.[6] Prussia had paid to Napoleon in levies, between 1806 and 1812, more than twice the amount of the total indemnity and she therefore objected to the moderate terms imposed upon France. England's moderate policy 100 years ago was sound.[7] Unfortunately, in the ill-timed election after the armistice ending the World War, Lloyd-George rode to victory on the passions of the mob, and promised to "hang the Kaiser" and "to make Germany pay to the last penny the cost of the war," the latter an utterly impossible undertaking.

With respect to the cancellation of the debt and the imposition of an enormous indemnity upon the defeated power, the Napoleonic wars afford no precedent for the policies proposed after the World War. However, history does afford numerous cases of repudiation of international indebtedness, both public and private.

B. The Extent of the Debt

The total cash advances by the United States to the Allies up to November 15, 1920, amounted to 9466 million dollars. Of this amount about 2400 million dollars was advanced after the signing of the armistice.[8] Advances by the United Kingdom up to March 31, 1920, amounted to 9251 million dollars gross, or deducting borrowings from the United States of 4197 million dollars, the net advances by the United Kingdom were 5054 million dollars. The advances of France to her allies amounted to 1582

[6] Mulhall, Dictionary of Statistics, 4th Edition, pp. 260 and 699.

[7] Clapham, J. H., Europe after the Great Wars, 1816–1920. Economic Journal, No. 120: 423–435, December, 1920.

[8] Exhibit 27, p. 340, Exhibit 25, p. 330, and letter of Secretary Glass Jan. 28, 1920, to Homer L. Ferguson, p. 81, Report of the Secretary of the Treasury, 1920.

million dollars up to January 1, 1920, but her borrowings from the United States and Great Britain amounted to 5540 million dollars, leaving the net borrowings 3958 million dollars. Excepting these three none of the Allied governments loaned money to a co-belligerent. The advances by Germany to her allies amounted to 1794 million dollars, but they are not relevant to the present discussion.

Of the total amount of loans by the United States, about 45 per cent were advanced to Great Britain, 31 per cent to France, and 17 per cent to Italy. Of the gross loans of Great Britain 31 per cent were advanced to Russia, 28 per cent to France, and 25 per cent to Italy. With the exception of about 6 per cent of the total loans, which were made to the British Dominions, practically all the British advances were made to the financially weaker Allies. In recognition of this fact Austen Chamberlain, Chancellor of the Exchequer, on several occasions stated that Great Britain had written off 50 per cent of her foreign advances as doubtful debts.

Of the total loans of France about 46 per cent were advanced to Russia.

INTER-ALLIED LOANS

(in million dollars; conversions at parity)

To—	By United States*	By United Kingdom†	By France§	Total
United Kingdom	4197	....	....	4,197
British Dominions	....	595	....	595
France	2966	2574	....	5,540¶
Russia	188	2840	721	3,749
Italy	1631	2278	....	3,909
Belgium	349	486	548	1,383
Servia	27	105	90	222
Other Allies	108	373	223	704
Total	9466	9251‡	1582	20,299

* Report of the Secretary of the Treasury, 1920; includes advances up to Nov. 15, 1920.

† Address of the Chancellor of the Exchequer; includes advances to Mar. 31, 1920.

‡ Gross, or 5054 million dollars net credit.

§ Statesmen's Year Book, 1920, p. 839.

¶ Gross, or 3958 million dollars net debit.

This tabulation indicates that the United States is a creditor only, and that Great Britain and France are both debtors and creditors, the former being a creditor on net balance, the latter a debtor. All the other Allies are debtors. The inter-Allied loans amount to 20,299 million dollars gross or 14,520 million dollars net.

C. Types of Proposals

The proposals for clearing the Allied debts and for liquidating them jointly date back to the autumn of 1917, when Edmond Théry published his proposals in the Economiste Européen. A few months thereafter Professor Charles Gide of the University of Paris proposed a financial unity of front, and the use of a common purse by all the Allies.[9] The proposed methods of liquidation varied from payment of principal only and cancellation of the interest, to redistribution of all debts, including domestic loans, in proportion to the wealth or population of the belligerents. Under this plan, in addition to cancellation of inter-government advances, the stronger nations would have to bear part of the internal debt of the weaker—an application of Bolshevism to the wealth of nations.

i. *Partial Cancellation*

(a) *Cancellation of Interest and Payment of Principal—*

A moderate suggestion for reducing the burden of the foreign debt was made by Jean Herbette,[10] to the effect that the lending states should refrain from charging any interest on the advances and that the capital should be repaid by annuities distributed over a long period of years. The £500 million due to Great Britain, for instance, would be paid in thirty annual installments of £17 million. This proposal really involved a cancellation of 50 per cent of the principal, for the present worth of 30 annual payments of £17 million at 5 per cent would be £260 million, or about half of the amount due.[11] The proposal was intended to

[9] La Revue d'Economie Politique, February, 1918.
[10] Temps, July 3, 1920.
[11] Sayous, André, Proposals for the Improvement of the Financial Situation in France, Paper No. XII International Financial Conference, p. 80, Le Temps, July 3, 1920. Economic Review, July 16, 1920.

apply to the British advances in the expectation that "Great Britain's consent would create a precedent that the United States could hardly fail to follow."

(b) *Cancellation of Loans to France*—

Although the French have repeatedly proposed methods of reducing the burden of the inter-Allied debt they never suggested cancellation of the French debt alone. "At the present time France is deeply anxious concerning her war debts to her Allies. She is astonished that the powers who shared the struggles with her do not propose some arrangement in which both past and future are to be taken into account."[12] The proposal to cancel the French debt alone was made by an American, Pierrepont B. Noyes, formerly American Commissioner in the Rhinelands. His proposal was baldly, "Forgive France all the debts she owes the United States as a result of the war." He did not urge the cancellation of Italy's debt to the United States, which is about 55 per cent of the French debt. If the extent of war damage is to be taken into account the debts of Italy and Servia should be remitted as well. Furthermore, he objected to the cancellation of the British loan, on the ground that Great Britain had obtained advantages from the war. If advantages gained as a result of borrowing in the United States offset the debt to the United States, the denial of the favor to Britain applies with little less force to France. If "the threat to Great Britain's carrying trade has been removed" the threat to France's industry has likewise been abolished. If "the removal of German intrigue from the politics of the Near East has relieved Britain's anxiety for the safety of India," the dissipation of the German colonial possessions has removed the challenge to French claims in Morocco. The advantages of proximity and sympathy which Mr. Noyes thought essential in judging the claims of the European powers may be offset by the advantages of detachment and calm judgment enjoyed by most Americans. The mere statement of the discrimination between the nations makes the proposal impolitic, impracticable and unjust.[13]

[12] Brussels Financial Conference, Paper XII, p. 80.

[13] Noyes, P. B., While Europe Waits for Peace, 1921. New York: Macmillan & Co.

(c) *Partial Cancellation of Loans by Great Britain*—

The suggestion has been made that Great Britain might cancel the debts which her allies owe her for munitions bought in Great Britain, while retaining their liability for sums loaned through Great Britain by the United States. In other words, this proposal contemplates that Great Britain should cancel that portion of the debt which was not offset by advances from the United States.[14]

In view of the fact that Great Britain considers that of her total loans, equivalent to 9250 million dollars, one-half the amount has been written off and in view of the fact that her indebtedness to the United States amounts to 4197 million dollars, this proposal would involve either a cancellation of the worthless portion of the debt or else the cancellation of the entire debt. Furthermore, since the 2800 million dollars loaned to Russia is hardly collectible, this proposal would not relieve France of her debt to Great Britain, amounting to 2600 million dollars.

ii. *Redistribution of the Debts*

The suggestions for the redistribution of the debt vary from the rather modest proposal to offset Britain's borrowings by Britain loans to the extreme and impossible scheme of pooling all the Allied debts, internal and external.

(a) *Offsetting Britain's Borrowings and Debts*—

In September, 1918, British statesmen were calling attention to the fact that the United States was making advances to Great Britain, which the latter in turn loaned to the other Allies. It was then also suggested that America make direct advances to the continental Allies, and that Britain's virtual endorsement should be unnecessary, on the correct assumption that the war was not the affair of Britain alone, but rather in the common interest, and that the burden could not be specifically allocated to her. Up to the end of 1917, of a total of 3656 million dollars loaned by the United States, Great Britain received 1860 million dollars. In the first half of 1918, of a total of 1968 million dollars advanced, Great Britain received 1215 million dollars. However, from July

[14] Suggestion of F. C. Goodenough, Chairman of Barclay's Bank, at the annual meeting, Jan. 26, 1921. Cable dispatch to Journal of Commerce, Jan. 27, 1921.

1, 1918, to November 30, 1918, an increasing share was extended directly to other countries. Of a total of 1672 million dollars in cash, only 721 million dollars was advanced to Great Britain and 511 million dollars, for example to Italy. After the armistice the amount advanced to countries other than Great Britain increased greatly. In the seven months ending June 30, 1919, France received 407 million dollars, Italy 382 million dollars, and Great Britain only 371 million dollars, and in the sixteen months ending November 1, 1920, the United States advanced in cash 331 million dollars to France, and 75 million dollars to Italy, while Great Britain repaid 80 million dollars.[15] The attitude of the British statesmen in 1918 led to certain proposals made in 1919, when a plan was put forward providing for the payment of Great Britain's debt to the United States with an equivalent amount of Allied government securities held by Great Britain.[16]

In 1921 Sir J. C. Stamp, the British statistician, proposed that the United States take over Europe's debt to Great Britain, on the ground that if the United States had entered the war earlier she would probably have loaned directly, rather than through Great Britain, and further that the United States could collect more easily from Europe because of her political aloofness. However, neither the hypothesis nor the prophecy carried sufficient conviction to justify the proposal to Americans.[17]

(b) *The Exchange of Inter-Allied Debts for German Indemnity Bonds—*

The proposal to have Germany liquidate the inter-Allied indebtedness was made by Professor Charles Gide.[18] According to him "the Entente countries ought to guarantee the indemnity to be paid by Germany, which in the form of bonds would be issued to the devastated countries to be negotiated by them. By this means all countries, those guaranteeing the bonds as well as those devastated, would have a common interest in the early recovery of Germany."

Mr. O. T. Crosby, Assistant Secretary of the Treasury of the

[15] Exhibits 28 to 32, pp. 340–347, Treasury Report, 1920.
[16] Associated Press dispatch, London, Dec. 9, 1919.
[17] London dispatch, Chicago Tribune, Jan. 7, 1921.
[18] In his Paper XIII (5), Brussels Financial Conference, dated July 12, 1920.

United States during the war, made a similar proposal.[19] He suggested that German indemnity bonds be taken by the United States in exchange for its war loans to the Allies. In addition he suggested the clearing of all inter-Allied debts. Any residue of obligations held by one national treasury against another was to be offered to private investors throughout the world without recourse. The advantage claimed was that the world-wide distribution to private investors would remove the dangers inhering in inter-governmental loans. The proposal was complicated. It was doubtful whether a wide distribution of the bonds could be effected, for few of the impoverished countries of Europe could buy them. Finally, either the indemnity bonds were good or they were not. If they were the Allied powers could sell them and liquidate their debts to the United States. If the indemnity bonds were not good, the United States should not be asked to take them. The proposal to convert the Allied debts to the United States into small bonds and to distribute them to private investors was characterized as "fatuous and impracticable" by Secretary Houston.[20]

(c) *Pooling of the War Debts*—

The pooling of the war debts and their repayment out of taxes levied upon all the belligerents, or as some suggest, upon all the countries of the world, in proportion to their wealth or population, would place a burden upon the United States even greater than the cancellation of the Allied debts.

1. French proposals—In the autumn of 1917 M. Edmond Théry proposed [21] that the Allied nations, poor and rich, should by a single joint operation liquidate all the financial obligations incurred since the beginning of the war. Such a joint loan would aid in stabilizing financial conditions and uniting the Allies after the war. In February, 1918, Professor Charles Gide appealed for a financial Entente after the war.[22] After the armistice, a profusion of schemes was put forward in France with the object of

[19] Crosby, O. T., International Governmental Loans, Annals Acad. Pol. & Soc. Sci., May, 1920, No. 178, pp. 231–233.
[20] Treasury Report, 1920, p. 64.
[21] L'Economiste Européen, Sept. 14, 1917. London Economist, Sept. 22, 1917.
[22] Op. cit.

transferring to the stronger Allies the burden of the war.[23] A bill was proposed by Deputy Jacques Stern to establish a financial union among the Allies and to distribute the expenses of the war among the nations on a basis of wealth or population. A loan of 518,000 million francs was to be distributed among the Allies, on the basis of population and production, and each state was to guarantee its proportion of the service of the debt from customs and other revenues.[24] The annual charge for interest and sinking fund would be distributed somewhat as follows: United States, 6316 million francs; Great Britain, 2827 million francs; France, 2452 million francs. A somewhat similar proposal was endorsed by Alexandre Ribot, former Premier and Minister of Finance. He advocated that "arrangements must be made that none of the Allies should bear a disproportionate share of the burden.[24a]

In the spring of 1919, M. Théry reiterated his proposals for an international loan guaranteed by the Allies, from the proceeds of which each of the nations would receive sums corresponding to the war debt and damages.[25] This proposal was sponsored by Raoul Peret, Chairman of the Budget Committee of the Chamber of Deputies. He said that "since an internal loan was impossible to float in France what was wanted was a financial league of nations." [26] The Committee on Peace Negotiations of the Chamber of Deputies approved the proposal that the Allies form an inter-Allied pool to reimburse the combatants for their war expenditures.[27]

Similar proposals were made by members of the Chamber of Deputies Vincent Auriol, André Lefèvre, Louis Dubois, Builloux-Lafant, Abel Gardey, Pierre Rameil.[28]

[23] Jèze, Gaston, La Reparation Equitable entre Alliés des Charges Financières de la Guerre, Revue de Science et de Législation Financières, XVII: 4, pp. 614–641, Oct. 1919. A summary of proposals and abstract of official debates.

[24] Associated Press dispatch, Paris, Dec. 15, 1918. New York Times, Dec. 17, 1918. Le Temps, Dec. 22, and Dec. 29, 1918. L'Humanité, Dec. 29, 1918. Journal Officiel, Chambre, Débats, pp. 3679 *et seq.*

[24a] Associated Press dispatch, Paris, Dec. 31, 1918. New York Tribune, Jan. 2, 1919. Journal Officiel, Sénat, Débats, Dec. 17, 1918, p. 881, May 30, 1919, Dec. 30, 1919, pp. 884, 1892.

[25] J. O. Chambre, Débats, p. 1059 *et seq.*, Mar. 7, 1919. Le Figaro and London Financial Times, Mar. 10, 1919.

[26] Associated Press dispatches, Paris, Feb. 6, 1919, and Feb. 28, 1919. Commercial and Financial Chronicle, Mar. 22, 1919.

[27] Associated Press dispatch, Paris, Oct. 6, 1919.

[28] J. O. Chambre, Débats, pp. 1059, 1062, 1071, 1098, 1120, 1135, 1166, Mar. 7–13, 1919.

The French position was summed up by Prof. Gaston Jèze.[29]

"During the war it was proclaimed, with numerous repetitions, that the Allies were pooling all their resources for the common victory. France, the least wealthy of the three Allies and the most tried by the war, received financial help which, it must be stated with emphasis, powerfully helped the Allies to win the war. The unanimous opinion of Frenchmen is that the unexampled sacrifices of human life; the destruction of all kinds inflicted upon the invaded regions; the complete stoppage during the four years of war of economic production, which was entirely devoted to the war; the heavy tribute paid by France to foreign ship owners, especially to the English—these fully make up for the money advances made to her. The unanimous opinion of Frenchmen is that to compel France to pay that foreign debt would not only impose an unbearable burden upon her, but also would perpetrate a serious injustice. The victory was won by the common effort of the Allies; the benefits and the sacrifices also must be shared in common."

2. ITALIAN PROPOSALS—The French proposals for a pooling of the war debt and its amortization by taxes levied in proportion to the wealth or population of the members of the Entente or of the world found a ready response in war-stricken and impoverished Italy. The Corriere della Sera of December 12, 1918, contained a proposal to pool the debt of the Allied countries and to issue a single international loan guaranteed by the Allied nations. The paper naïvely claimed that the advantage of the proposal was that Italy and France would benefit by the adoption of this principle of justice. The Giornale d'Italia of December 25, 1918, after presenting the relevant statistics of national wealth and revenue, debt and debt charges, endorsed a similar proposal. Professor Luigi Einaudi, one of the leading Italian economists, sponsored this proposal and suggested an international tax on the consumption of raw materials, coal, petroleum and cotton, for the amortization of the contemplated world bonds.[30] Luigi Luzzatti, former premier of Italy, and an authority on finance, urged an international pooling of the debt, and the support of Italy and the weaker Allies. The worth of his proposal may be gauged by the fact that he recommended the unification of all currencies and the international support of exchange rates.[31] An identical proposal was endorsed by Senor Crespi, of the Italian delegation to the Peace

[29] The Economic and Financial Position of France in 1920. Quarterly Journal of Economics, February, 1921, vol. XXXV:1.
[30] Corriere della la Sera, Jan. 10, 1919.
[31] Associated Press dispatch, Rome, Feb. 5, 1919.

Conference, who pleaded for a unity of financial front of all the Allies.[32]

3. BRITISH PROPOSALS—During the war a proposal for the international pooling of the debt was embodied in a book "The Great Plan," by E. A. Stillwell. His plan was that an international body should call for a list of war costs of the nations and should pay them with 100-year world bonds. The inter-Allied debt could then be disposed of simply by clearing and canceling. The world bonds would be non-interest-bearing and would be used as currency. For the repayment of the bonds each state would contribute the savings effected in the reduction of armament expenses. Of course this proposal was laughed out of court. Inflation would have increased, international government was non-existent, international taxes were not feasible, and disarmament on such a basis was hardly possible.[33]

Professor Jacks, of Oxford University, editor of the Hibbert Journal, also sponsored the scheme for the international pooling of the war debts, including those of the former enemy powers. Each nation was to contribute proportionately to the annual interest and sinking-fund charges.[34] Unlike the French and Italian economists and statesmen the British paid scant attention to such schemes, with the exception of R. P. Houston, of the House of Commons, whose proposal, unique among responsible Britishers, provided for the pooling of the debts of the Allies "including the United States."[35]

iii. *Complete Cancellation of the Inter-Allied Debts*

The proposal to cancel all the inter-Allied debts originated in Great Britain. This plan is simpler and would require less administration than the utterly unworkable scheme of internationalizing the war debts and of levying international taxes.

(a) *British Proposals*—

1. HISTORY—During the war the British government suggested that the United States make advances to France and Italy

[32] Associated Press dispatch, Paris, Feb. 2, 1919.
[33] Stillwell, E. A., The Great Plan, London: Hodder & Stoughton, 1918.
[34] London dispatch, New York Tribune, Feb. 4, 1919.
[35] Liverpool correspondence, Journal of Commerce, Nov. 19, 1919.

direct rather than through the intermediation of Great Britain. The idea underlying this request took another form after the war. The proposition to cancel all inter-Allied debts was first put forward shortly after the armistice by Sir Martin Conway in an article in the New York Times and the London Morning Post. During the Peace Conference in the early part of 1919, the plan was again suggested by the financial experts of the British delegation and the British treasury representatives also made informal proposals to this effect.[36] The American delegates scouted the plan and no formal request was made by the British. The idea was revived in 1920, during the Hythe and Boulogne conferences of the Allied premiers. Lloyd George, it was reported from Boulogne, stated that the United States had refused to entertain the request to cancel the advances to Great Britain subject to British cancellation of her advances.[37] One of the proposals at the Hythe Conference provided for paralleling the payment of the French debt to England with German payments to France, on the condition that America afford similar treatment to England.

2. BY KEYNES—John M. Keynes, British treasury representative at the Peace Conference, made a clear public appeal for the cancellation of the inter-Allied indebtedness, as an essential to the future prosperity of the world. However, he made the important reservations that the indemnity should be set at a very moderate figure, 7500 million dollars, adequate to cover entirely the actual cost of restoring the devastated areas, and that Great Britain should waive altogether her indemnity claims in favor of Belgium, Servia, and France.[38]

3. BY HORNE—Sir Robert Horne, president of the Board of Trade, in an interview in the London Daily Graphic, stated that "the only solution of many of the international problems was the proposal, mooted some time ago, that America should waive England's indebtedness upon the condition that England did the same with the other European countries; in a word, that there should be a forgiveness of debts all around."[39]

[36] Associated Press dispatches, Feb. 12, 13, 1921.
For presentation of the British view, see Trouton, R., Cancellation of Inter-Allied Debts. Economic Journal, XXI:121, March, 1921. pp. 38-46.

[37] Paris dispatch, New York Times, June 21, 1920.

[38] Keynes, J. M., Economic Consequences of the Peace, pp. 269-270, American Edition.

[39] London dispatch, New York Times, Jan. 7, 1921.

4. By Lloyd George and Chamberlain—At the Paris conference between Lloyd George and Briand, for the determination of the amount of the German indemnity, Lloyd George probably expressed a Freudian wish when he said "Meanwhile let us act as if the debts did not exist. If the creditor does not worry me, I do not worry the debtor."[40] One of the factors determining the high figure set for the German indemnity was the indisposition of the United States to cancel the debt of the Allies. That this subject was uppermost in the minds of British statesmen was evident from the fact that after the high figure for the indemnity had been fixed Austen Chamberlain, Chancellor of the Exchequer, publicly announced the fact that Great Britain had made proposals for canceling the inter-Allied debts, but they were not acceptable to the government of the United States. "In making them we sought no advantage for ourselves; we proposed a solution in which we should have forgiven claims larger than any remitted to us and we proposed it because we believed it would be in the interest of good relations among peoples, the rehabilitation of international credit and the restoration of international trade. Our great external debt was due to the obligations we undertook on behalf of our allies. If we had only ourselves to consider we should be practically free of external debt at the present time."[41] Mr. Chamberlain said that he would have preferred at the close of the war that the whole international debt of the allied and associated governments should have been wiped out and that all should have started with clean slates.

As late as September 27, 1921, and after the 1922 budget had provided for the payment of interest on the debt to the United States government, Winston Churchill speaking at Dundee of the prospective disarmament conference at Washington said, "It would be for the benefit of the world if all the international obligations arising out of the war were reconsidered, reduced to practical dimensions and placed in a category by themselves."

The exact form of these requests was revealed in testimony on S.2135, a bill introduced by Senator Penrose, giving the Secretary of the Treasury very broad powers to negotiate the settlement of the inter-Allied debts. Speaking before the Senate Committee on Finance, Secretary Mellon submitted a cablegram, dated Febru-

[40] Paris dispatch New York Times, Feb. 1, 1921.
[41] London dispatch, New York Times, Feb. 4, 1921.

ary 9, 1920, from Austen Chamberlain, Chancellor of the Exchequer to R. C. Leffingwell, then Assistant Secretary of the Treasury. It reads, "We should welcome a general cancellation of the inter-Governmental war debts. . . . The existence of these international debts deters neutrals from giving assistance, checks private credits and will, I fear, prove a disturbing factor in future international relations."

Of similar tenor is a letter, dated August 5, 1920, and addressed to President Wilson by Premier Lloyd George. It reads, "After great difficulties with his own people, M. Millerand . . . pointed out that it was impossible for France to agree to accept nothing less than it was entitled to under the treaty, unless its debts to its Allies and Associates in the war were treated in the same way. This declaration appeared to the British Government eminently fair. But after careful consideration they came to the conclusion that it was impossible to remit any part of what was owed to them by France except as part and parcel of all around settlement of inter-Allied indebtedness. . . . But the principal reason was that British public opinion would never support a one-sided arrangement at its sole expense, and that if such a one-sided arrangement were made, it could not fail to estrange and eventually embitter the relations between the American and British people with calamitous results to the future world.

"You will remember that Great Britain borrowed from the United States about half as much as its total loans to the Allies, and that after America's entry into the war it lent to the Allies almost exactly the same amount as it borrowed from the United States. Accordingly the British Government has informed the French Government that it will agree to any equitable arrangement for the reduction or cancellation of inter-Allied indebtedness, but that such an arrangement must be one which applies all around. . . .

"I should very much welcome any advice which you might feel yourself able to give me as to the best method of securing that the whole problem could be considered and settled by the United States Government in concert with its associates. . . . I should like to make it plain that this (postponement of negotiations) is due to no reluctance on the part of Great Britain to fund its debt, but solely to the fact that it cannot bind itself by any arrangement which would prejudice the working of any inter-Allied arrangement which

may be reached in the future. If some method can be found for funding the British debt, which does not prejudice the larger question, the British Government will be glad to fall in with it."

(b) *American Proposals*—

There were a number of American proposals for the cancellation of the debt. Mr. Frank A. Vanderlip, in June, 1919, proposed the remission of American loans to France and England. Ex-Attorney General George W. Wickersham, in a public address, advocated a similar course.[42] The liberal weeklies, such as the New Republic, advocated the cancellation of the debt, not on financial grounds but for the purpose of moderating the impossible claims of France against Germany.

D. The Objections to Cancellation

i. *American and Foreign Opposition*

During the House hearings on the Victory Loan Act in the early part of 1919, when it was important that there be no obstacle to a successful flotation, Albert Rathbone, Assistant Secretary of the Treasury in charge of the Foreign Loan Bureau, told the committee that "officials of foreign governments have always expressed the intention of their governments to pay their indebtedness and said that they had no intention of doing anything else. It is true that there have been one or two suggestions by statesmen not holding any public office that the debts should be forgiven. There is no body that can forgive these debts except the Congress. The Treasury Department does not advocate and never never has advocated anything but the collection of these debts.[43]

With reference to the proposals of the French deputies, Stern and Peret, and with reference to the rumor that President Wilson had been requested at Paris to recommend the cancellation of the loans, the French High Commission in the United States announced that "the Prime Minister has cabled an order to deny most emphatically that such a suggestion had been made to Presi-

[42] Associated Press dispatch, Oct. 20, 1919.

[43] Hearings on bill to amend the Liberty Bond Act, before Ways and Means Committee, House of Rep. 65th Cong. 1st Sess., Feb. 13, 14, 1919, p. 56 *et seq.*

dent Wilson by any French official, and that the French government had nothing whatever to do with the project (of MM. Stern and Peret) and is not giving its support to the resolution." As for the British, Mr. Rathbone said they stated that "it would be unthinkable that their government should not pay its debts. They say they do not want charity, that they borrowed the money and intend to pay."[44]

"President Wilson and his advisers without exception, opposed vigorously and finally any suggestions of cancellation, from start to the finish of the Peace Conference."[45] An official statement on the subject of the cancellation of the war debts was contained in a letter dated December 18, 1919, from Secretary Carter Glass to Joseph W. Fordney, chairman of the Committee on Ways and Means of the House, in which he said, "While the Treasury favors such an arrangement (funding of the demand obligations and the deferring of interest payments) it does not favor the cancellation and indeed has no power to cancel any portion of the interest or principal." Another official statement appeared in the report of the Secretary of the Treasury for the year 1920. After stating a number of the variations of the proposal to cancel the debts, giving the pros and cons, he says:

"I imagine neither of these suggestions will be received with favor by the American taxpayers. . . . The suggestion that we should throw them (the bonds) upon the market appears to me to be as fatuous and impracticable as either of the other suggestions. . . . The reasonable and proper course is to proceed under the terms of the existing law, which authorized the Secretary of the Treasury to fund the demand notes, coupled with the authority, for the time being, to defer interest payments."

Two official communications made the position of the United States Government clear and unequivocal. On March 1, 1920, Secretary Houston wrote to Austen Chamberlain, Chancellor of the Exchequer, that the proposition for a general cancellation of the inter-Allied debts would "serve no useful purpose. I feel certain," he added, "that neither the American people nor our Congress, whose action on such a question would be required, is prepared to look with favor upon such a proposal. The Allies' debt

[44] Washington dispatch, New York Times, Feb. 23, 1919.
[45] Statement of T. W. Lamont, Associated Press dispatch, St. Augustine, Feb. 15, 1921.

to each other and to the United States is not a present burden upon the debtor governments since they are not paying interest or even, as far as I am aware, providing in their budgets any taxes for the payment of their principal or interest."

The Secretary also pointed out the evident fact that the cancellation of inter-Allied indebtedness was not the sole or important cause of financial distress in Europe. He pointed out that too little progress had been made in the direction of disarmament while no appreciable progress had been made in deflating excessive issues of currency or in stabilizing the currencies at new levels. In Continental Europe there had been constant increases in note issues and private initiative had not been restored. Unnecessary and unwise economic barriers still existed.

Seven months later, in October, 1920, President Wilson wrote, in reply to the letter of Lloyd George of August, 1920, a very decisive note, similar in tenor to that of Secretary Houston. It reads, "You will recall that suggestions looking to the cancellation or exchange of the indebtedness of Great Britain to the United States were made to me, when I was in Paris. Like suggestions were again made by the Chancellor of the Exchequer in the early part of the present year. The United States, by its duly authorized representatives, has promptly and clearly stated its unwillingness to accept such suggestions each time they have been made, and has pointed out in detail the considerations which caused its decisions.

"The view of the United States has not changed, and it is not prepared to consent to the remission of any part of the debt of Great Britain to the United States. Any arrangements the British Government may make with regard to the debt owed to it by France, or by the other Allied governments, should be made in the light of the position now and heretofore taken by the United States, and the United States, in making any arrangements with either Allied governments regarding their indebtedness to the United States . . . will do so with the confident expectation of the payment in due course of the debt owed the United States by Great Britain. It is felt that the funding of these demand obligations of the British Government will do more to strengthen the friendly relations between America and Great Britain than would any other course of dealing with the same.

"This Government has endeavored heretofore, in a most friendly spirit, to make it clear that it cannot consent to connect

the reparation question with that of intergovernmental indebtedness. . . . Unless arrangements are completed for funding such loans, and in that connection for the deferring of interest, in the present state of opinion here there is likely to develop a dangerous misunderstanding. . . .

"The United States entirely agrees with the British Government that the fixing of Germany's reparation obligation is a cardinal necessity for the renewal of the economic life of Europe, and would prove most helpful to the interests of peace throughout the world. However, it (the United States) fails to perceive the logic in the suggestion in effect that the United States shall pay any part of Germany's reparation obligation, or that it shall make a gratuity to the Allied governments to induce them to fix such obligations at the amount within Germany's capacity to pay."[46]

ii. *The Justification and Benefits Considered*

(a) *Financial Justifications*—

The financial justifications are that our debtors cannot pay, that the sum is too great, that the budgets of the debtor countries have deficits, that their exchange rates are upset, that Europe can pay only in goods, and will therefore resort to dumping in the United States, and that the United States sacrificed relatively least in the World War. Let us consider these points.

1. INABILITY TO PAY—Upon the entry of the United States into the war the shipments of gold by Great Britain and France and the sales of foreign holdings of American and neutral securities ceased. During the war and until the release of the "peg" in March, 1919, the Allied powers relied primarily on advances by the United States government and did not utilize the measures employed before April, 1917. The record of the foreign holdings of the securities of the United States Steel Corporation, the American Telephone & Telegraph Co., and the New York Central Railroad Co., show a cessation of selling during the period of our belligerency.

On February 1, 1917, the amount of New York Central bonds held abroad was 25 per cent of the pre-war amount and on February 1, 1919, it was 27 per cent. By July, 1920, renewed foreign

[46] These two letters were inserted by Senator Lodge into the Congressional Record, Senate, July 18, 1921.

selling had reduced the amount further. The percentage of New York Central Railroad Co. stocks outstanding abroad at the end of 1917 was 20 per cent of that at the end of 1914. There was practically no foreign liquidation during our participation in the war and it was only after the release of the "peg" that such liquidation was resumed. At the end of 1920, the amount outstanding abroad was 15.6 per cent of the pre-war figure. More striking are the figures of the United States Steel Corporation. From June 30, 1914, to March 31, 1917, the sales of the foreign holdings of United States Steel Common amounted to 61 per cent of the pre-war amount. From the month of our entry into the war (April, 1917) to the month of the release of the "peg" (March, 1919) the liquidation was 0.1 per cent, a negligible figure. The Allies depended upon United States government advances for financing their purchases. Upon the release of the "peg" and cessation of United States government advances, foreign liquidation was resumed and by September 30, 1920, about 13.4 per cent more of the pre-war foreign holdings of United Steel Common were sold. An analysis of the foreign holdings of preferred stock of the United States Steel Corporation shows likewise heavy liquidation by Europe until our entry into the war, no liquidation during the period of United States government advances, and further selling when these advances ceased. Of American Telephone & Telegraph stock held abroad at the beginning of the war 36 per cent was sold up to April 1, 1917. By March 14, 1919, the foreign holdings actually increased by 1.6 per cent of the pre-war figure; but by September 20, 1920, another 15.2 per cent of the pre-war holdings were sold. Similar conclusions result from an analysis of the liquidation of the foreign holdings of New York Telephone Co. First and General Mortgage 4½'s.

These figures show clearly that Great Britain at least would have continued the liquidation of her mobilized securities, if the United States had not advanced government funds. The Dollar Securities Committee in Great Britain showed that about 1000 million dollars of American securities were mobilized for sale and 2000 million dollars were mobilized for deposit. Sir George Paish and other responsible economists estimated that the total foreign investments of Great Britain before the war amounted to 20,000 million dollars, and that of this amount only 5000 million dollars

had been sold. None of the Indian, Colonial or South American securities had been mobilized. Great Britain had outstanding after the war according to her own authorities, approximately 15,000 million dollars of foreign investments. Apparently, the argument that the Allies cannot pay does not hold. In fact, the British budget for 1921–1922 provided for £42 million to cover interest due to the United States. And if inter-government loans must be eliminated, why cancel them? Why not make some provisions for substitution of private for public securities?

Neither in amount nor in marketability are the French foreign investments as available as the British. The fundamental defect of French foreign financial policy was the heavy investment in second rate "governments." According to former Minister of Finance Louis Klotz, the pre-war foreign investments of France amounted to fr. 40,000 million, about $8000 million. True, about half of this amount was invested in Russia and another one-sixth in Turkey and in what was formerly Austria-Hungary. Still approximately fr. 13,000 million, about $2600 million, of French foreign investments are available after deducting these securities of questionable value. The scheme for the mobilization of French securities during the war did not work. Frenchmen refused to part with them. M. Descamps, head of the securities department of the Bank of France, addressing the October (1920) meeting of the Société Française d'Economie Politique stated that the total sales of French holdings of foreign securities did not exceed fr. 600 million, and that the largest part of the foreign holdings were still intact. The total amount of salable French holdings of foreign securities may not be equal to the net 4000 million dollars which the French government owes to the governments of Great Britain and the United States, but her foreign securities have not been completely wiped out. They are still available for part payment of the debt.

Furthermore, after the armistice, the nationals of both Great Britain and France made large foreign investments,—in Germany, Austria, the succession States, and Turkey. Although the amount is not known, it probably exceeds the interest due to the United States Government. Finally, the ordinary budget of France for 1921 provided for fr. 4613 million for military operations, and the extraordinary budget for fr. 2814 million, of which more than

half covered military expenses in Syria, Cilicia, and Morocco. Whether these governments are able to pay is not for the lender, the United States, to say. International ill-will may result. The facts, however, speak for themselves.

2. HUGENESS OF THE SUM—The advocates of cancellation say that such huge figures of international debts are without precedent in history. They say that the sum is far too great. A few comparisons may be adduced to test the validity of this argument. In 1921, the premiers of Great Britain and France decided that Germany could pay an indemnity of 55 to 132 billion gold marks, in spite of the fact that she was shorn of territory containing coal mines, potash pits, and factories devoted to her basic industries, was deprived of her merchant fleet, and was subject to a one-sided interpretation of most-favored nation rights and to all the penalties imposed upon her by the treaty of peace. If, under these conditions, Germany can pay 55 to 132 billion gold marks, cannot France, after the increase in her territory, privileges and prestige accruing from the peace treaty pay the United States a debt of about 3000 million dollars?

There is another angle from which these questions may be regarded. The total foreign debt, fixed and floating, privately and publicly held, of the Allied governments, is a relatively small fraction of the total debt. It is true that, insofar as the exchange rates and interest payments are concerned there are important differences between domestic debts and foreign debts; nevertheless these differences do not make cancellation inevitable. A large part of the debts of the governments of South America was held abroad—90 per cent in the case of Argentina.[47] This fact was not a reason for their cancellation.

TOTAL PUBLIC AND PRIVATE FOREIGN DEBT OF PRINCIPAL BELLIGERENTS
(conversion at parity)

Country	Million dollars	Per cent of total debt
Great Britain	6200	16.3
France	6500	15.3
Italy	3910	25.9
Belgium	326	8.6

[47] Williams, John H., Argentine International Trade under Inconvertible Paper Money, p. 13.

By contrast, Germany will have a foreign debt of 55 to 132 billion gold marks, equivalent to over 50 per cent of her total debt, if the indemnity figures determined in London, May 5, 1921, remain unchanged.

3. BUDGET DEFICITS—The European governments indebted to us have huge deficits in their budgets, say the advocates of cancellation. But in their eyes the budget deficits seem to be the mote and the interest due to the United States seems to be the beam. With the exception of Great Britain the countries of Europe had deficits which in 1920 were thirty times or more as great as the interest due to the United States on government advances. The interest which France would owe on United States government advances is only 1.6 per cent of the total budget expenditures, 2.8 per cent of the total budget deficit, and 6.7 per cent of the total service of the debt. The interest which Italy would owe on United States government advances is 1.7 per cent of the total budget expenditures for 1920, 3.0 per cent of the total budget deficit, and 7.9 per cent of the total charges for service of the debt. The interest which Belgium would owe is 1.0 per

INTEREST ON UNITED STATES GOVERNMENT ADVANCES COMPARED WITH ITEMS IN 1920 BUDGETS [48]

(conversion at parity)

Country	Annual interest due on U. S. Government advances (in million dollars)	Budget Expenditures		Budget Deficit		Debt Service	
		Amount (in million dollars)	Ratio of U. S. interest	Amount (in million dollars)	Ratio of U. S. interest	Amount (in million dollars)	Ratio of U. S. interest
	(a)	(b)	(a) : (b) Per cent	(c)	(a) : (c) Per cent	(d)	(a) : (d) Per cent
Great Britain...	209.8	5760	3.6	.....	.....	1680	12.5
France.........	147.3	9450	1.6	5230	2.8	2210	6.7
Italy...........	81.5	4750	1.7	2740	3.0	1030	7.9
Belgium........	17.0	1710	1.0	980	1.7	205	8.3

[48] The amounts are taken from Table 1, Paper IV, of the International Financial Conference, at Brussels, 1920.

cent of the total budget expenditures of 1920, 1.7 per cent of the deficit, and 8.3 per cent of the total charges for the service of the debt. A corresponding comparison for the minor belligerents would show similar results. As for Great Britain, her 1920 budget has no deficit and the argument for cancellation on this score falls.

The budget for 1922, submitted April 25, 1921, provided £40 million to pay interest on United States government advances. A Treasury circular of May 25, 1921, called for economy in view of the need to pay the above interest.

The mere cancellation of the inter-Allied indebtedness will not make the budgets balance. Furthermore, since the interest on the debt to the United States has been deferred for three years, it does not figure as a charge in the budget and will not do so for another year at least.

4. THE UNSETTLEMENT OF EXCHANGE RATES—The advocates of cancellation maintain that the interest on the debt due the United States is the cause of the unsettlement of the exchange rates. Few arguments could be more unsound. Before the war Great Britain, France, Italy and Belgium had an excess of imports. Compared to 1913, this excess in 1920 was about three times as great in Great Britain, eight times as great in France, over nine times at great in Italy, and about twice as great in Belgium. An important cause of the unsettlement of the exchange rates of the European powers is the tremendous increase in the excess of imports. The interest due the United States, even if it were not deferred for three years, would create a relatively small supply of bills on these European governments. The ratio of the interest payable on United States government advances to the excess of merchandise imports is only 11 per cent for Great Britain, 6 per cent for France, 4 per cent for Italy, and 3 per cent for Belgium. A corresponding comparison for the minor countries would show similar results.

The interest on the United States debt is a small fraction of the total excess of imports of the debtor countries and is not a significant cause in the derangement of exchange rates. And even if it were, the interest for three years has been deferred by the Secretary of the Treasury and therefore present exchange rates are practically unaffected by the interest payable to the United States in the future.

INTEREST ON UNITED STATES GOVERNMENT ADVANCES COMPARED WITH EXCESS OF IMPORTS

(conversion at parity)

Country	Excess of Imports			Interest on U. S. debt	Ratio of interest to 1920 excess of imports
	1913 (million dollars)	1920 (million dollars)	Ratio 1920 to 1913		
	(*a*)	(*b*)	(*b*) : (*a*) Per cent	(*c*)	(*c*) : (*b*) Per cent
Great Britain....	650	1860*	286	209	11
France..........	300	2460†	820	147	6
Italy............	219	2095‡	957	81	4
Belgium.........	257	491§	191	17	3

* Based on 11 months' official figures
† Based on 11 months' official figures, 11,682 million francs.
‡ Based on 6 months' official figures, 5043 million lire.
§ Based on 10 months' official figures, 2122 million francs.

5. RELATIVELY SMALL SACRIFICES OF THE UNITED STATES—The advocates of cancellation point to the relatively small sacrifices of the United States compared with those of the other Allies. The weakness of this argument for cancellation is recognized even by Keynes. "This could hardly have been otherwise. It was a European quarrel, in which the United States government could not have justified itself in expending the whole national strength as did the Europeans."[49] The question of sacrifice may be regarded in relation to the period of belligerency, the gains from the war, and the national wealth of the belligerents. The relative sacrifice of the United States was not least from the point of view of the period of the belligerency. In nineteen months the United States incurred a national debt of 25,000 million dollars as compared with 34,000 million dollars, the war debt incurred by Great Britain during four years and three months of war, or a debt of 24,000 million dollars incurred by France during the same period. During the six months of fighting after the Battle of Château-Thierry, the actual loss in men by the United States was relatively as heavy as that of any of the other belligerents. The relative sacrifices of the United States with respect to gains

[49] Keynes, J. M., *idem*, p. 273.

from the war certainly was not least. True, Mr. Wilson said that we asked for nothing. But it is also true that we got nothing. Is the United States, then, to pay the expenses of securing gains to its co-belligerents? In his argument for the cancellation of the debt of France to the United States Mr. Noyes says, "Great Britain has already obtained advantages from the war, whose value for her future is incalculable. The threat to Great Britain's carrying trade, which just before the war was very menacing, has been removed, and the German merchant fleet has largely been transferred to her. The specter of a growing German navy has vanished. The British colonial empire has been immensely strengthened at the expense of Germany and the removal of German intrigue from the politics of the Near East has relieved a former anxiety for the safety of India."[50]

But the gains of France have been equally vital. A powerful and threatening imperial neighbor has been made impotent and democratic by the joint effort of all the Allies. In announcing the extensive gains of France as a result of the war, Finance Minister Klotz, in the debate, in the Chamber of Deputies, September 15, 1919, on the ratification of the treaty of peace, stated that the terms of the treaty assured a bright future to France. The railway materials, agricultural implements, and other property stolen by Germany was to be returned. France obtained part of the German shipping tonnage and large stocks of dyes, 7 million tons of coal per year for 10 years, the return to France of Alsace-Lorraine free of all debts, a portion of the German interest in Russia, the right to sequester all German property in Morocco, and a French mandate over part of the German colonies. In addition France obtained the right to claim not only full reparation for damage to property during the war but also to the payment of the cost of all pensions and allowances resulting from it.

The other powers, Italy, Belgium, Rumania, and Servia, likewise obtained material benefits because of the participation of the United States. From the standpoint of relative gains, the United States did not sacrifice least of the Allies.

Only from the point of view of wealth did the United States make a small sacrifice, though by no means the least. Although the figures for national wealth are not accurately determinable,

[50] Noyes, P. B., While Europe Waits for Peace. New York: Macmillan & Co., 1920.

they are approximately correct. Using the accepted figures of Dr. J. C. Stamp,[51] the post-war debt, expressed in terms of national wealth, is 10.97 per cent for Japan, 12.59 per cent for Belgium, and 13.01 per cent for the United States. Similarly, the post-war per capita debt of the United States is not the least of the Allied powers. The per capita debt of Japan is $22.14, of Greece $105.25, of Canada $189.45, of Belgium $246.67, and of the United States $249.38.[52] If the mere fact that the United States is wealthy is to be a justification for canceling the debt, by the same token any poor nation might call upon one of the richer to help share its burdens in times of peace. To do so may be ethically correct, but there are no sound principles whereby the procedure of the redistribution of the national wealth of the countries of the world may be effected.

The advocates of cancellation indulge in many hypotheses. Mr. Noyes, the advocate of cancellation of the French debt, and the editors of the New Republic,[53] advocates of general cancellation, advance the postulate that if we had entered the war earlier we would have spent more on our own account, instead of having the Allies spend it for us. However, these "ifs" and "ands" lead nowhere. Such assumptions are fruitless. If the United States had been content to fight a defensive war, as Japan did, or if the United States had not given its blood and treasure without stint or limit, the result for the European Allies might have been different. France might have been ruined and England seriously reduced in prestige. During its progress the war was conceived as a holy cause, but most of the foreign diplomats have degraded it into a scramble for territory and privilege. Inspiring ideals became merely a *ruse de guerre*. Furthermore, the war was not an American quarrel primarily. It grew out of age-long and festering animosities on the continent maintained by social traditions. The fact that the United States was regarded as an associate rather than as an ally is a recognition of its remoter interest. As Mr. Harding stated baldly, "The United States entered the war to defend its ships." And now it is being asked to pay part of the indemnity. The assumptions and hypotheses put forth by the advo-

[51] Wealth and Income of the Chief Powers, British Statistical Journal, July, 1919.

[52] Including debt, covering loans to Allies, which were about 33 per cent of the total debt.

[53] Dec. 22, 1920, p. 98.

cates of cancellation are not convincing arguments for the release of the foreign governments from their formal obligations, although they have value in supporting an attitude of reasonableness and moderation. Secretary Houston after stating them concluded, "In the circumstances we must deal with the debts of the Allied governments in a spirit of fairness."[54]

6. DUMPING OF EUROPEAN GOODS—Another argument for the cancellation of the debt is that the Allies cannot pay in gold, because 9600 million dollars of gold are not available. If they pay in securities, the interest on the securities can be met only by the shipment of goods. The settlement of international indebtedness can be effected only by the flow of commodities. Therefore, say the advocates of cancellation, American trade will be ruined if Europe pays her debts by dumping her goods. On this theory international trade is profitable only if a country has an excess of exports, even if these exports are shipped as a gift. According to this view our billions of excess of exports during the war constitutes the greatest "handout" in history. Under such a theory the irony of the phrase "a favorable balance of trade" exposes the fallacy of lingering mercantilist conceptions. Before the war England, France, Germany and most of the countries of Europe had an excess of imports of merchandise, which was offset by invisible credits. If the Allies pay us in goods we also may ultimately have an excess of imports of merchandise, but the economic conditions of the country will have become adjusted to it. The overturn of the balance of trade is a normal phenomenon of an industrially maturing country.

(b) *Political Justifications*—

In addition to the financial justifications for the canceling of the inter-Allied debts, political considerations are adduced in support of the policy. The inter-Allied loans, it is said, will endanger peace and the victors will be paying an indemnity to each other. Furthermore, America's advances to the Allies constituted the cost of destroying militarism. Let us assess the argument.

1. PAYMENT OF INDEMNITY BY VICTORS—In advocating the cancellation of the inter-Allied debts, it is said that "the war will

[54] Annual report of the Secretary of the Treasury, 1920, p. 64.

have ended with a network of heavy tribute payable from one Ally to another, an amount even likely to exceed that obtainable from the enemy. The war will have ended with the intolerable result of the Allies paying indemnities to one another, instead of receiving them from the enemy." [55] The fact of the matter is that if the inter-Allied debts are canceled America will be paying the indemnity to the European Allies. Great Britain will lose nothing. Her borrowings from the United States approximately equal her good debts for she has already written off 50 per cent of her advances, because they were made to the impoverished countries of the Continent. But about 50 per cent of the United States advances were made to Great Britain. Cancellation of the inter-Allied debts will impose the heaviest penalty upon the United States. If America is to be penalized for having helped to win the war, by the same token Germany ought to be rewarded for having made the attack.

2. THE COST OF CRUSHING MILITARISM—It is said that the burden involved in the cancellation of the inter-Allied debts is the contribution of the richer countries toward the destruction of militarism. The aftermath of the war has disillusioned even the peacemakers as to the destruction of militarism. President Wilson, in a letter to Senator Hitchcock on May 8, 1920, said: "Militaristic ambitions and imperialistic policies are by no means dead, even in councils of the nations whom we most trust, and with whom we most desire to be associated in the tasks of peace. . . . For my own part I am as intolerant of imperialistic designs on the part of other nations as I was of such designs on the part of Germany." The subsequent chauvinist continental policies corroborate the President's statement more fully than did the cases he cited. Militarism is not dead. It merely changed its garb and transferred the sphere of its operations. The belief of the Sandwich Islander that the spirit of the slain enters the victor's body and strengthens him finds ghastly confirmation in the post-war diplomacy on the continent of Europe.

3. IMPERILING OF PEACE—In favor of cancellation the argument is advanced that the existence of war debts leads to hatred of the creditor country and is an incentive to break relations with

[55] Keynes, *idem*, p. 277.

it. Apparently a new standard of ethics is to be set up. Good will is to be purchased and friendship is to be had for a consideration. On this theory an expression of animosity by the debtor is to be equivalent in the future to the creditor's acknowledgment of payment in full.

Loans, received with gratitude by debtors in distress, have for centuries been the source of ill will when they matured. Jeremiah expresses this thought when he says, "I have neither lent nor have I borrowed, yet everyone curses me." The 9500 million dollars spent during the war must be paid by someone. Bonds for this amount are held by American citizens. If the Allies do not pay, the American taxpayer will. Whoever liquidates the debt will entertain a sense of injury, whether it be the citizen of the foreign government or the American taxpayer. If the debtor pays he hates the creditor, and if the debtor does not pay the creditor hates him. Faith between borrower and lender has been maintained because the welcher's fear of social stigma is stronger than his animosity toward the lender.

On the other hand, say the advocates of cancellation "if these accrued debts are forgiven a stimulus will be given to the solidarity and true friendliness of the nations lately associated." [56] These international benefits of cancellation are undoubtedly exaggerated. The common war apparently did not check antagonism between Italy and Jugoslavia when their interests conflicted. Great Britain and France expressed such divergent views on the question of a moderate indemnity that Lloyd George had to threaten the Paris press because of its hostility toward the British. It is infantile to assume that acts of generosity between the nations result "in true friendliness." The Allied press was profuse in its laudations of American generosity at the time that the inter-Allied advances were made, but were malicious in their criticism of American moderation at the peace-table. Cancellation of the debt by the United States may lead to a temporary outburst of gratitude. It will not promote permanent international solidarity.

The inter-Allied debts do not endanger peace. Before the war Great Britain had 20,000 million dollars invested abroad, of which 3500 million dollars was invested in the United States. France had 8000 million dollars invested abroad of which 4000 million dollars was invested in Russia. The amount of the United States

[56] Keynes, *idem*, p. 279.

government advances are not much larger than the French pre-war foreign investments and less than half as great as the British. Although technically there is a distinction between private and public ownership of bonds of a foreign power, yet in effect there is none. If the Allies default, or if the debt is canceled, the American taxpayer will have to bear the burden.

The advocates of cancellation of the inter-Allied debts are without historic justification or precedent in their prophecies of international friction and ill-will. Over 90 per cent of the Argentine debt was held by foreigners. France specialized in government securities before the war. They were not regarded as dangerous when France was the creditor. Why should they be any more dangerous when France is a debtor? It is said that before the war international debts were incurred for productive needs, and in this respect they differ from the inter-Allied debts. But some of the government loans made before the war were not advanced for productive purposes. Furthermore, to the extent that the victorious Allies gained materially, the war debts to the United States may be regarded as productive loans.

International loans endanger peace less than the imperialistic ambitions of those nations of Europe which have obtained independence or added power as a result of the war. There is little fear of war between the United States and the debtor Allies if the loans are not canceled. There is, however, genuine fear of a new war if these loans are canceled. Militaristic Germany was the aggressor in the World War among other reasons because of her low per capita debt before the war. Her successors in imperialist policies in Europe will be subject to a similar temptation. A heavy foreign indebtedness to a peace-loving power like the United States is to a degree a guarantee of the peace of Europe. The world is temporarily insured against war by reason of the fact that the unsatisfied nations of Europe will have to pay off the debts of one war before they can obtain credit to enter upon another.

In fact Senator Borah would have the United States utilize the debts of the foreign governments as a means of reducing armaments and military operations. In his opinion, nations expending large sums for these purposes should be compelled to pay promptly the interest due.[56a]

[56a] Cong. Record, Senate, July 25, 1921.

iii. *Arguments Against Cancellation*

The objections to cancellation are that the United States will be the chief loser, that the shaking of international faith may lead to repudiation elsewhere, that new credit plans for the revival of Europe may be ruined, and that domestic creditors of Europe will be favored as against foreign creditors.

(a) *Heaviest Loss to the United States*—

The United States made cash advances of 9466 million dollars, of which Great Britain received 4197 million, France 2966 million, and Italy 1631 million. Russia received only 2 per cent of the total, and the remainder went to the lesser Allies. None of the debtors of Great Britain has the strength or credit standing of the chief debtor of the United States. In other words, the loans by Great Britain and France are not as collectible as the loans of the United States. Even though the nominal amount advanced by Great Britain, 9251 million dollars, approximates the amount advanced by the United States, the collectible portion is far less. Great Britain, for instance, advanced about 31 per cent of her total to Russia, and France almost 50 per cent.

Of the total debt of the United States, amounting to about 26,000 million dollars, roughly 10,000 million dollars constituted advances to the Allies. In other words, about 40 per cent of the interest paid by the United States on bonds outstanding is on account of the indebtedness of the Allies. However, this does not imply that 40 per cent of the expenses of the post-war budget result from the failure of the Allies to pay the interest on their indebtedness. In fact the net burden to the United States is only about 450 million dollars per annum. The annual interest owed by the Allies constitutes about 10 per cent of the post-war budget of the United States. However, because of the graduation of the income tax, the rich will pay more than 10 per cent additional, if the Allies default permanently on the interest.

(b) *Crippling of International Credit*—

Cancellation by the United States will probably result only from a pressure by the debtors, equivalent to repudiation. The whole delicate structure of international credit is based on confidence among nations. Great Britain still has almost 15,000

million dollars invested abroad and France almost 8000 million dollars, although much of the latter is in securities of doubtful value. Cancellation under pressure will shake the structure of international credit, particularly the credit of those debtors who fail to pay the inter-Allied debts. Furthermore, France's net indebtedness on government loans is 3958 million dollars and the Russian indebtedness alone to France on pre-war account exceeds this amount. If, as the result of pressure the French debt to the United States amounting to 2966 million dollars is canceled, how can France expect revolutionary Russia to pay the debts incurred by the Czarist regime?

The post-war period should be a period of increased international faith, and strengthened confidence in international credit. To secure these all nations should scrupulously observe their obligations. The cancellation under pressure of the inter-Allied debts will not further these ends. Enforced cancellation will ruin new credit plans. One cannot eat one's cake and have it; one cannot break one's faith and keep the confidence of others. Cancellation, if it were whole heartedly entered into by the United States, might improve credit conditions, just as a bankrupt's credit is temporarily improved after a settlement with creditors. However, the stigma of having failed to observe his obligations weakens for a long time the credit of a bankrupt. Similarly the proposed cancellation would weaken international credit in a crucial period.

(c) *Priority of Lien of Foreign Creditors*—

The international financial situation bears a close resemblance to a private bankruptcy. The Allies cannot pay the interest on their debts and the United States government, the creditor, has agreed to defer it. The Allies are technically insolvent; they are unable to meet current indebtedness out of current revenue. Under these conditions the rules of bankruptcy should apply. In private bankruptcy, the rule is that claims of stockholders are last in order of priority on the list of liens against assets. By analogy, in public finance internal loans should be junior to external loans. In other respects the rules of private bankruptcy are being applied in Europe to-day. New loans are being made, secured by liens against specific sources of revenue. They are the equivalent of receiver's certificates in private finance. The methods of financing a bankrupt and of strengthening his credit after a composition or a

reorganization are applicable in the present condition of the governments of Europe. If external creditors are regarded as junior to internal creditors, then the United States will have underwritten the financial incompetence of France and Italy, because of their failure to follow the British precedent of heavy taxation during the war.

E. Alternative Proposals

Undoubtedly the balancing of the pros and cons would indicate that the Allies ought to pay their obligations faithfully. However, payment in cash is impossible during the disturbed conditions of exchange and the only course practicable under those conditions is the one recommended by the Secretary of the Treasury: interest should be deferred until the situation settles and the ultimate course becomes clarified.

i. *The Intent*

(a) *Loans not Subsidies*—

The advances to the Allies were regarded as legal loans, not as subsidies. There is no way whereby the Allies may be released from their obligations other than through an act of Congress. The debtor governments have deposited obligations with the Secretary of the Treasury which read in part as follows: [57]

Certification of Indebtedness

$.............

The Government of .... for value received, promises to pay to the United States Government, the sum of .... dollars on demand, with interest from date hereof .... per cent per annum. Such principal and interest thereon will be paid, without deduction for any (foreign) taxes, present or future, in gold coin of the United States of America of the present standard of weight and fineness, at the Treasury of the United States in Washington. This certificate will be converted by the Government of .... if requested by the Secretary of the Treasury of the United States of America at par with an adjustment of accrued interest, into an equal par amount of .... per cent Convertible Gold Bonds of the Government of ....

....
(Signature of representative
of foreign government)

[57] Annual Report of the Secretary of the Treasury, 1920, p. 56.

To find flaws in the technical form of the loans would make of them the most artful dodge in the annals of nations.

(b) *Military Exigency vs. Financial Prudence*—

At the time the cash was advanced by the United States, the considerations were not financial prudence but rather military exigency. The advances were made during a period of exaltation and collection is attempted during a period of sober second thought. The crux of the difficulty is not in the Allied request for cancellation of loans which they find it extremely difficult to pay but in the readiness with which a generous creditor advanced much more than the debtor's condition warranted. In other words, these loans must be regarded not as business loans, made with all due regard to commercial considerations, but as war loans based primarily on the vital interests directly of the Allied debtors and indirectly of the United States government.

ii. *Impossibility of Cash Payment*

The insistence on present cash payment by the Allies would lead to grave financial disturbances. It is true that Great Britain has planned the retirement of credit advances of 150 million dollars made during the war by a group of Canadian banks to finance purchases of war materials in the Dominion.[58] However, the amount involved is insignificant, about 3 per cent of the British debt to the United States government.

(a) *Effect on Exchange Rates*—

Interest on external loans cannot be paid even if interest on internal loans is paid. Payment of interest on internal loans is simply a bookkeeping transaction. Cash is taken from one group in the community as taxes and paid to another group in the community as interest on bonds. An external loan, however, involves a transfer of funds out of the country and this can be accomplished at present not by means of currency but by means of bills of exchange. This distinction is not clear even to diplomats. French officials called attention to the fact that the German budget provided 12,000 million marks for interest on internal bonds.[59] They

[58] New York Tribune, Dec. 31, 1920.
[59] Associated Press dispatch, Paris, Dec. 20, 1920.

say that these funds should be paid to the Allies rather than to the German bondholders because the treaty of peace provides[60] that "sums for reparation that Germany is required to pay shall become a charge upon all their revenues prior to that for service or discharge of any domestic loan."

In view of the depreciated foreign exchanges of the debtor governments it would not be to the advantage of the United States to demand cash payment of interest.[61] The depreciation of the foreign exchanges makes it impracticable for the debtor governments to pay in dollars. "The United States Treasury has no need for any considerable amount of these currencies and could not afford to accumulate large idle foreign balances. If the Treasury does not defer the collection of interest and thus adds to the present difficulties by demanding an immediate cash payment of interest before the trade of Europe has an opportunity to revive, we should not only make it impossible for Europe to continue needed purchases here and decrease their ultimate capacity to pay their debt to us, but should hinder rather than help the reconstruction which the world should hasten. A nation may liquidate its foreign debts only by the accumulation of foreign credits, which may be accomplished through an excess of commodity exports, invisible exchange items, the creation of credits by loans or by the export of gold."

The interest if paid would create an additional supply of 450 million dollars per annum of bills of exchange, for which there is no demand in the United States. The Allies cannot during this period liquidate even their current indebtedness on imports but must have additional credit in order to be able ultimately to adjust their international balance.

(b) *Payment in Foreign Securities*—

Instead of having the debt canceled the European governments would be able to settle by transferring to the United States their holdings of foreign securities. True, the transfer of these securities from private owners to the government would involve a difficult financial operation in both Great Britain and France. However, the mobilization of securities in Great Britain during the war

[60] Annex 2, Art. xii, paragraph b.

[61] Annual report of the Secretary of the Treasury for 1919, pp. 66–67 and for 1920, p. 59. Also letter Dec. 18, 1919, of Secretary Glass to Representative Fordney.

affords ample demonstration of the feasibility of the operation. The debt of the British government to the United States amounts to 4197 million dollars. The foreign investments of British capitalists amount to about 15,000 million dollars, according to the estimates of Sir George Paish and other competent authorities. The debt of the French government to the United States amounts to 2966 million dollars. The holdings of foreign securities by Frenchmen amount to about 8000 million dollars, in which are included obligations of the old Russian empire amounting to about 4000 million dollars. Since the inter-Allied loans are not due until 1938 and 1947, there will be considerable time to effect the transfer, in instalments, from private investors to the government.

Even if the foreign governments do not substitute the security holdings of their nationals for the government debt to the United States, there is a possibility of liquidating this debt by means of short-term bills. The experience of Argentina before the war and of other countries which borrowed heavily abroad indicates that the depreciation of exchange due to the payment of interest abroad stimulates exports and tends to raise the exchange rate. It is within the range of possibility that before the due date of the debts the depreciation of sterling exchange may stimulate exports to the extent that these exchange rates would rise to the gold import point. In this event, instead of exporting gold the United States should be able to return an equivalent amount of the obligations of the British government. Before the war the international movement of securities was an effective means of avoiding gold shipments. The Secretary of the Treasury recommended also that the agreement with the foreign governments should give the United States government the right to use the obligations of those governments in settlement of war claims hereafter made against the United States, and should provide for accelerating the payment of all deferred interest whenever the exchange rates of the foreign government reached the gold import point.[62] The same condition would hold for the continental debtors, if they adopt new gold parities.

(c) *Payment in American Territorial Possessions*—

The suggestion that Great Britain transfer part of her American colonial possessions to the United States in liquidation of her

[62] Annual Report of the Secretary of the Treasury, 1920, p. 62.

indebtedness was made in the late summer of 1919 by Lord Rothermere and by the London National News.[63] As a private citizen, ex-Secretary McAdoo suggested a similar course.[64] Senator Willis, of Ohio, introduced a bill into the Senate with the same object in view.[65] The territory affected would include Bermuda, the Bahamas, Barbados, Jamaica, Trinidad, the Windward Islands, the Leeward Islands, British Honduras, and British Guiana.

The proposal that France pay for part of her debt to the United States by transferring her American colonial possessions was advocated by Professor Charles Gide, on the ground that it would save the cost of developing these hardly profitable territories, and that perhaps the military expense of maintaining far-flung possessions is a luxury that France cannot afford. He recommends that French colonial aspirations should be confined to Africa.[66] The possessions involved are French Guiana, with an area of 32,000 square miles and a population of 49,000, and the islands Martinique, Guadalupe, St. Pierre and Miquelon, with a total area of 1200 square miles and a population of about 410,000. The settlement by transfer of territory would not relieve the American taxpayer from repayment of bonds equivalent to the amount of the Allied debt.

The objections to this course are both financial and political. The price of these grains of sand in the Atlantic Ocean has risen out of all proportion to previous purchases. The United States paid almost twice as much for the Virgin Islands as for the Lousiana territory, and more than 3 times as much as for Alaska. Furthermore, it would be political irony if the principle of self-determination, which President Wilson made the battle cry of the war, should be violated by the United States after the peace. The British West Indians objected to the proposal to transfer them from British to American sovereignty and the British Foreign Office expressed its opposition in 1920 and again in 1921.[67] Any transfer of these possessions might be preceded by a plebiscite, although none was held on the Virgin Islands prior to their transfer from Denmark to the United States. The objection of financial

[63] New York Times, Aug. 21, and Sept. 14, 1919.
[64] New York Times, Mar. 5, and Mar. 6, 1920.
[65] New York Times, Feb. 14, 1921.
[66] Associated Press dispatch, Paris, June 4, 1920.
[67] New York Times, Oct. 29, 1919, Mar. 7, 1920, and Associated Press dispatch, London, Feb. 20, 1921.

imperialism is directed against the proposal to have Europe cancel claims against various South American republics as part payment of the debt to the United States.

iii. *Present Course*

(a) *The Law*—

The Second Liberty Bond Act, approved September 24, 1917, authorized the Secretary of the Treasury to "exercise in respect to any obligations of foreign governments the privilege of conversion into obligations bearing interest at a higher rate and to convert any short-term obligations of foreign governments into obligations maturing not later than the bonds of the United States" issued under the First and Second Liberty Bond Acts Section 8 of the Victory Loan Act provides that "obligations of foreign governments acquired by virtue of provisions of the First Liberty Bond Act or through the conversion of short-time notes acquired under that Act shall mature not later than June 15, 1947, and that all others shall mature not later than October 15, 1938." In a letter dated September 18, 1919 to Representative Fordney, Secretary Glass wrote:

> "With the ending of the war and of the program of our loans to foreign governments it was considered proper to take up the funding of the demand obligations now held by the United States into long-time obligations; and in view of the fact that, as indicated by a study of the foreign exchanges, the reconstruction of Europe has not proceeded to a point where Europe can pay by exports even for its necessary food, it was considered by the Treasury most expedient that, as part of the general funding arrangement, provision should be made for deferring and spreading over a later period the payment of interest which would accrue during the next two or three years. . . .
>
> Under these circumstances [of depreciated exchange rates] an impenetrable barrier exists which makes it impracticable for these governments to pay in dollars the amount of interest due from them to the United States. This involves no question as to the solvency or responsibility of these governments nor the failure to raise funds by loans and taxes from their people, and a corresponding burdening of our people, but results from the conditions of the foreign exchange market. If the governments of the Allies were to raise immediately by taxes and loans the whole of their debt to us, those taxes and loans would produce only sterling, francs and lire, and these foreign currencies would not furnish one additional dollar of dollar exchange, because conditions do not permit those currencies now to be converted into dollars. The United States Treasury has no use at the present time for any considerable amount of these currencies and could not afford to accumulate large idle foreign balances."[41]

[41]Annual Report of the Secretary of the Treasury, 1920, p. 60.

(b) *Deferment of Interest Payments*—

The Secretary pointed out that the failure to defer the collection of interest would further derange the economic situation of Europe and he was therefore most reluctant without specific instructions from Congress to the contrary to demand the immediate payment of interest. He asked the Ways and Means Committee, which shared with the Secretary of the Treasury the initial responsibility for the Liberty Loan Acts, whether it questioned his power to "spread over subsequent years the interest which would accrue during the reconstruction period and to include such amounts in the time obligations." The Committee replied that there was no legislative bar to the procedure proposed. Negotiations looking to the deferring of interest and to the change of the demand obligations for long-time obligations were undertaken in Europe in the fall of 1919 and the spring of 1920. This procedure does not solve the question; it merely postpones the solution.

(c) *Negotiations by the Secretary of the Treasury*—

Bill S.2135, introduced by Senator Boies Penrose on June 23, 1921, would authorize the Secretary of the Treasury, according to the Majority Report of the Senate Committee on Finance, to refund or concert and to extend the time of payment of the principal or the interest, or both, of any obligation of any foreign Government now owing to the United States . . . . into bonds or other obligations of such, or of any other foreign Government, and to receive bonds and obligations of any foreign Government in substitution for those now or hereafter held by the United States. The bill would provide that the obligations received under its provisions shall be in such form and of such terms, conditions, date or dates of maturity, and rate or rates of interest, and with such security, if any, as shall be deemed by the Secretary of the Treasury, with the approval of the President, for the best interests of the United States.

The bill gives the Secretary of the Treasury, with the approval of the President, power to accept the obligations of countries other than the debtor countries. There has been some discussion concerning the intention or thought on the part of the Secretary of the Treasury of accepting obligations other than those of the debtor country, particularly German bonds. In the letter of the Secretary

to Senator Penrose, dated July 26, 1921, it is clearly stated that the Secretary of the Treasury does not intend to accept obligations other than those of the debtor country in the case of the principal debtor countries which owe the United States in the aggregate, without accrued interest, over $9,000,000,000; and as to the other debtor countries that it is not his intention to accept any German bonds unless it becomes necessary or desirable to do so in some now unforeseen special cases. This bill provides for the refunding or conversion of the debts owing to the United States by Czechoslovakia, Greece, Rumania, Russia, Serbia, Poland, and other countries. These countries also owe large amounts to countries other than the United States. Their resources and their ability to pay differ widely and the conditions that will have to be dealt with can not be foreseen. It may be, in the case of some of these countries, that the Secretary of the Treasury, with the approval of the President, may deem it advisable to accept obligations other than those of the debtor country in settlement of their debts to the United States.[68a]

The bill gives no authority to cancel any part of the indebtedness of any foreign government to the United States. The Secretary repeatedly and vigorously denied his intention or willingness to cancel any part of the debt. The single formula embodied in the Victory Bond Act was too rigid to permit complete negotiation.

iv. *Ultimate Course*

(a) *Not an American but an International Problem*—

The disposition of the inter-Allied debts is not an American problem. It is an international one. The debt of Great Britain to the United States is approximately equal to the advances made by Great Britain to the Allies after the entry of the United States into the war. At the time of these advances to Great Britain her statesmen urged that America lend to the other Allies directly—a course which was later adopted. Similarly, France made loans to the governments of the lesser Allies which are a partial offset to her borrowings from Great Britain and from the United States.

[68a] Report of the Majority of the Committee on Finance on bill S. 2135 empowering the Secretary of the Treasury to refund the obligations of Foreign Governments. Calendar 275. Senate Report 264. 67th Congress, 1st Session.

The international character of these advances was stressed at the conferences at Lympne and Hythe, in May, 1920. The official statement issued at the end of deliberations read:

"The British and French governments are of the opinion that in order to provide a solution for the economic difficulties which are gravely weighing upon the general situation of the world . . . it is necessary to arrive at a settlement which shall embrace the whole body of the international liabilities which have been left as a legacy of the war, and which shall at the same time insure a parallel liquidation of the inter-Allied war debt and of the reparation debts of the Central Empires."

The settlement of the inter-Allied debt is not solely an American problem, because it is intimately connected with the determination of the amount of the indemnity and with the method of its collection. At the Hythe Conference a tentative agreement was reached between Premiers Lloyd George and Millerand under which the liquidation of the inter-Allied debts should be regulated by the rate and extent to which Germany met the liability imposed upon her by the Reparations Commission. The object of this agreement was to reconcile France to the moderation of the terms of the indemnity and to the adoption of less rigorous methods of enforcing the treaty. However, America's refusal to consider the cancellation of the debt compelled the abandonment of the arrangement between the premiers, for it would have shifted the entire burden to Great Britain. In view of her heavy indebtedness to the United States, Great Britain could not agree to the postponement or the cancellation of inter-Allied obligations to her. At the Paris conference to fix the amount of the German indemnity, Premier Lloyd George made a clear statement on the inter-Allied war debts:

"There must be a general arrangement. We owe to America, France owes us; other nations owe France. No solution is possible while America remains outside the discussion. Meanwhile, let us act as if the debts did not exist. If the creditor does not worry me, I do not worry the debtor." [69]

(b) *Cancellation Not a Panacea—*

As was shown above, the cancellation of the American debt will not make the budgets of the European governments balance.

[69] Associated Press dispatch, Paris, Jan. 30, 1921.

The interest on the debt to the United States is not the sole or even an important cause of the deficit. Furthermore, the demand for dollar exchange to pay the interest on the debt is not the sole or even an important cause of the depreciation of the exchanges. The increase of the excess of imports of the countries of Europe in the post-war years over the pre-war years is many times larger than the interest on the debt to the United States government. Finally, the deferment of the interest on the debt during the period of reconstruction has temporarily the identical effect of cancellation. In effect, the United States has canceled for three years the debt of the foreign governments.

The repeated requests by the spokesmen of the foreign governments for the cancellation of the debt to the United States hide the real issue. The cancellation of loans would be treating the symptoms of the financial disease in Europe. The cause is more fundamental. As the Brussels Financial Conference reports clearly pointed out, Europe requires primarily peace, a cessation of military operations and preparations, the restoration of the economic unity of Europe, the removal of the economic frontiers between the succession states of the Austro-Hungarian Empire, the resumption of trade with Russia, reciprocity in most-favored-nation-treatment of Germany, and the revision of the treaty to permit the revival of economic life in Germany and thereby in Europe. These needs indicate but a few of the fundamental maladjustments in European affairs which are delaying the return to normal conditions. As Norman Angell pointed out in "The Great Illusion":

"Wealth in the civilized world is founded upon credit and commercial contract. If these are tampered with by a conqueror, the credit-dependent wealth not only vanishes, thus giving the conqueror nothing by his conquest, but in its collapse involves the conqueror."

Those who stress the importance of the cancellation of the inter-Allied debts overlook the basic difficulty that the budgets of Europe are awry, and that two years after the armistice their currencies are still being inflated. The cancellation of the inter-Allied debts is not the first step in the convalescence of Europe. It may be the last, particularly if the nations of Europe proceed of their own accord to fulfill the prerequisite conditions above mentioned.

(c) *Cancellation not an Unconditional Gift*—

Cancellation is not a right due to Europe nor should it be an unconditional gift by the United States, should subsequent events prove the inability of Europe to pay. Although America's unstinted support of the war and the absence of any selfish request of hers at the peace conference entitled her to demand a just settlement, her spokesmen were defeated on several important principles. America should not blindly surrender the remaining hostage for a righteous peace, the war debts of Europe, the last remnant of a once powerful influence for good in European affairs.

(d) *Prerequisites of Settlement*—

Although the temper of the Congress and of the country are largely opposed to the cancellation of the debt, conditions in Europe may prevent its payment either at the end of the three years of grace or at any time. Future conditions may necessitate the modification of the debt of the smaller powers. This course should be strictly conditioned upon such action by the Allied governments as will hasten the recovery of Europe and the return of stable economic conditions, particularly in Central Europe.

If America is to modify the debt, one of the conditions precedent ought to be a decided moderation of the indemnity. Probably because, as Mr. Lamont pointed out,[70] both the President and his advisors were unqualifiedly opposed to the Allied proposals for the cancellation of the American debt, the peacemakers at Paris were unable to agree upon a moderate indemnity within the capacity of Germany to pay. Had they done so perhaps Europe would have been on the road to recovery shortly after the ratification of the treaty by the Allied powers. It may still be possible for America to dictate a workable economic program to the bellicose and chauvinist states, created or enlarged by the treaty.

The revision of the treaty in the phases suggested by Keynes, Angell, Brailsford, Noyes, Bass and others as essential to the restoration of Germany and the revival of Europe may be brought about by the United States. We may be "buying moderation and common sense" at the cost of a part of the debt of the weaker debtor powers. However, unless the United States is willing to make concessions it cannot expect Europe, which is bearing a far heavier burden, to do so. Perhaps the modification of the debt by

[70] Associated Press dispatches, Feb. 16, 1921.

America may help check the rampant imperialism in Europe, which by no means died when Germany was defeated. The modification of a part of our debt should be conditioned upon the acceptance of a disarmament program. Otherwise the release of some of the European countries from their present heavy burdens may be an incentive to resume aggressive military policies.

v. *The Need of an American Foreign Policy*

The balancing of the pros and cons of the argument indicate that several debtors will ultimately be able to pay. However, future conditions in the smaller of the debtor states may make modification unavoidable. If the issue is pressed in the immediate future, the American government should insist on the fulfillment of certain conditions, which will make for the restoration of economic stability in Europe and of world peace.

Such a constructive program, however, implies that there is a definite American policy. Unfortunately, such is not the case. Changes of administration always mean changes of policy and frequently a sudden break. During his election campaign Mr. Harding stated that there would be a "complete reversal in our foreign policy."[71] In Europe, where policies are maintained consistently for generations even, statesmen are bewildered by the sudden *volte face* in American diplomacy. Whatever be the details of the policy of the Harding administration one issue stands clear—the desirability of Anglo-American friendship.

At the end of the Napoleonic wars, when Lord Liverpool was the spokesman of a powerful public opinion in urging the dismemberment of France, Lord Castlereagh wrote, "It is not our business to collect trophies but to bring the world back to peaceful habits. . . . I do not believe this (peace) to be compatible with any attempt now permanently or materially to affect the territorial character of France . . . neither do I make it a clear case that France even with her existing dimensions may not be found a useful rather than a dangerous member of the European system." Substitute Germany for France and the words are as true to-day as one hundred years ago. British diplomacy is not intransigent. It need give vent to no hate. It seeks trade, now if ever not an unworthy policy. The restoration of Europe requires calm vision,

[71] New York Times, Aug. 17, 1920.

arbitration of differences, and cooperation with former enemies. The British have shown their capacity in this direction. The reconciliation with the Boers and their loyal support of England in the recent great crisis, and more recently the restoration, earliest among the Allied powers, of alien property sequestered during the World War, are evidences of the British policy of peace and moderation.

In spite of the minor points of difference between Great Britain and the United States, they must cooperate if the world is to have peace. The decision on cancellation of the inter-Allied debts depends upon the furtherance of this primary aim in American foreign policies—Anglo-American unity to preserve the peace of the world and to restore its economic functioning.

CHAPTER XVI

THE GERMAN INDEMNITY

Historic precedents are lacking for the huge indemnity imposed upon Germany. After the Napoleonic Wars defeated France had to pay only about $140 million. England was responsible for the moderation of the terms in spite of the fact that the British debt in 1817 was about $4240 million and the French debt was less than one-quarter as great. Prussia on the other hand was in favor of imposing a higher indemnity because the value of the property requisitioned by Napoleon in Prussia amounted to more than twice the total indemnity.

A. The French Indemnity of 1871

The indemnity paid to Germany by France in 1871 affords an interesting parallel to and some striking differences from the present German indemnity.

i. The Facts

The preliminary peace terms, signed in February, 1871, called for the payment of an indemnity of fr. 5000 million. The Treaty of Frankfort, signed May 10, 1871, stipulated that payment be made as follows: Fr. 500 million thirty days after the restoration of order in Paris; fr. 1000 million during 1871; fr. 500 million before May 1, 1872; fr. 3000 million before March 2, 1874. The last item bore interest at the rate of 5 per cent, and might be anticipated. The form of payment might be in gold or silver, notes of the central banks of England, Prussia, Netherlands, or Belgium, or prime bills of exchange. There were three steps in this large banking operation. First the French Government had to obtain credit, then the proceeds had to be converted into a form acceptable tc the German Government, and finally the credit had to be transferred to Germany. As part payment on account, France was credited with fr. 325 million, the value of the Rail-

road Company of the East situated in the territory annexed, and fr. 98,400 paid on account by the city of Paris. Subsequent to the signing of the treaty Germany agreed to accept payment in notes of the Bank of France for fr. 125 million. These items totaled fr. 450,098,400, leaving a balance of fr. 4,549,901,600, which with interest of fr. 301,145,078 made a final balance of fr. 4,851,046,678.

To meet this demand, France raised a loan of fr. 2225 million in 1871 and fr. 3500 million in 1872, which furnished the means of paying the indemnity. The loans were heavily oversubscribed. Fifty-nine per cent of the second loan was taken by foreigners. Only a small portion of the payment of the indemnity was in coin or specie and the larger part was in bills of exchange. Payments were divided into three groups.[1]

	Francs	
I. Allowances:		
On account of Railroad Company of the East	325,000,000	
Payment by the City of Paris	98,400	
Total		325,098,400
II. Specie, Coin and Notes:		
Bank of France notes	125,000,000	
German notes and coin	105,039,145	
French gold coin	273,003,058	
French silver coin	239,291,876	
Total		742,334,079
III. Bills of Exchange:		
German	2,799,514,184	
Other than German	1,448,812,190	
Total		4,248,326,374
Grand total		5,315,758,853

The method of raising the funds was similar to that used by Great Britain in the late war—the foreign securities owned by native investors were replaced by bonds of the home government, which paid the former against debits abroad. France obtained bills of exchange on many countries by offering its own bonds to

[1] Liesse, André, Evolution of Credit and Banks in France. Report of National Monetary Commission, Washington, 1909, pp. 150–160. Conant, C. A., History of Modern Banks of Issue. New York: G. P. Putnam, 1915, pp. 56-60. Monroe, Arthur E., The French Indemnity of 1871 and Its Effects. Harvard Review of Economic Statistics, Prelim. Vol. I, 1919. pp. 269-281. Say, Léon, Rapport sur le Paiement de l'Indemnité de Guerre, in Les Finances de la France, I, p. 363.

foreigners, who subscribed liberally, and France also bought foreign bills in the open market through an exchange operation with the underwriting bankers. The effect on the foreign exchange market was slight.

ii. *A Comparison of the Indemnities of 1871 and 1921*

There are many points of similarity between the indemnity that Germany imposed upon France after the Franco-Prussian War and the indemnity that the Allies plan to impose upon Germany after the World War. In fact, the draft of the treaty of peace with Germany is in parts based specifically upon the precedent of 1871. For example, articles 255 and 256 of the recent treaty read that "inasmuch as in 1871 Germany refused to undertake any portion of the burden of the French debt, France shall be, in respect of Alsace-Lorraine, exempt from any payment" of the German debt. "In view of the terms on which Alsace-Lorraine was ceded to Germany in 1871, France shall be exempt from making any payment of credit for any property of the German Empire situated therein." Both indemnities are alike in that payment by installments is provided for, credit is allowed on account of the army of occupation, and deductions made for property seized by the victorious power.

But there are trenchant differences. The war between Germany and France lasted from July, 1870, until February, 1871. The World War was over four years in duration. The Franco-Prussian War was not attended by the depreciation of industrial equipment and utter destruction of foreign trade that characterized the World War. After 1871 France enjoyed very high credit abroad. Foreigners subscribed heavily to the post-war loan that liquidated the indemnity. Her foreign trade increased greatly, and her balance of imports was replaced by a balance of exports after 1871.

FRENCH FOREIGN TRADE
(in million francs)

Year	Imports	Exports	Total	Balance
1870	2867	2802	5669	− 65
1871	3566	2872	6439	−694
1872	3570	3762	7332	+192

Germany's foreign trade after the World War is a small fraction of her pre-war trade. Her machinery of commerce has either been taken over by the victorious powers or else replaced by that of other nations. Furthermore, prolonged shortage of goods in Germany makes it necessary to postpone exports until the home demand has been reasonably satisfied.

The French indemnity, though huge as compensation, is insignificant (about 3 per cent) compared with the present indemnity. The former could be liquidated in gold and bills of exchange. The latter cannot. Even though the German indemnity is fixed at 132 billion gold marks, payment in gold metal would require about four times the world's total gold supply. There would not be a sufficient number of bills of exchange available to her credit to pay the indemnity. Besides, Germany's credit is so low that she cannot command extensive credit abroad. The German indemnity must therefore be paid in goods, by means of an excess of exports over a series of years.

German savings would not be available for meeting the indemnity as the French savings were. Whereas paper savings, or deposits, have increased in Germany, the economic surplus has not risen. The increase in savings measures merely the depreciation of the currency. In 1871 the French savings represented real assets, which were willingly put at the disposal of the government. Since the military collapse of Germany, the morale of the people has been broken and their confidence in the finances of the government is impaired.

B. Estimates of Property Damage

The estimates of property damage vary greatly. According to Keynes, the total amount of physical and material damage in northern France was about $2500 million. Réné Pupin, the French statistician, set the material losses at 2000 to 3000 million dollars.[3] Official committees were appointed by Germany and France to estimate the war damage in northern France. The Ger-

[3] Keynes, *ibid.*, pp. 127, 129. See also Lapradelle, G. de, Les Conséquences Economiques de la Paix.

Revue Politique et Parliamentaire, June 10, 1920, pp. 309-330, a criticism of Keynes' figures.

Streel, E. du V. de Les réparations financières dues à la France, Revue, July 10, 1920, pp. 26-40.

man estimate was mk. 7228 million gold or about $1720 million. The French estimate according to M. Louis Dubois of the Reparations Commission, was fr. 62,034 million gold, or about $11,975 million, as follows: [8]

	French estimate, Million francs	German estimate, Million marks
Industrial establishments and mines..........	7,260	1203
Habitation and monuments....................	29,000	2760
Agriculture, irrigation, etc.....................	16,295	675
Woods, forests, game and fish..................	1,488	209
Railways, post, telephone and telegraphs........	3,919	405
Roads, bridges, rivers, canals and ports.........	1,572	97
Taxes and war contributions....................	2,500	0
Portable property confiscated..................	0	1879
Total................................	62,034	7228

Estimates made by several French officials are considerably higher. M. Dubois, of the Budget Commission of the Chamber of Deputies, estimated a minimum of $13,000 million without counting war levies, losses at sea, roads or public monuments. M. Loucher, Minister of Industrial Reconstruction, figured that the reconstruction of the devastated areas would cost $15,000 million, or more than double the entire wealth of the inhabitants, as estimated by M. Pupin. M. Klotz set the damage to French property at $26,800 million, including losses at sea, but not pensions and allowances. The French claims as finally submitted to the Reparations Commission amounted to 218,541 million paper francs of which damage to property constituted 64.4 per cent, pensions and allowances 33.6 per cent and reimbursement to civilians 2.0 per cent.

The total losses to all the Allies as estimated by Mr. Keynes amounted to $10,650 million, distributed as follows: Belgium, $2550 million, France $4000 million, Great Britain, $2850 million, and other Allies, $1250 million. If, notwithstanding the clear terms of the armistice, pensions and allowances should be included, the added losses to the Allies would equal about $25,000 million.

[8] *Le Matin*, Aug. 1, 1920.

C. Proposed Indemnity

i. *Treaty Provisions*

Under the terms of the treaty, the amount of the indemnity was left indeterminate. The American and some British experts submitted a low figure, the French and some other British experts submitted high figures. Agreement at the time was impossible and the determination of the amount was postponed. The American justification of this procedure was that on sober second thought the Allies would consent to a moderate sum; the theory of the French was that as Germany recovered they could collect additional amounts. Furthermore, the French war cabinets had made extravagant promises to the electorate and the determination of a moderate sum would have embarrassed the politicians.

The terms of the treaty provided for the payment of $5000 million, before May 1, 1921, but deduction might be made for the cost of the armies of occupation and such supplies of food and raw materials as the Allies should judge essential to enable Germany to meet her obligations for reparation. Payment amounting to $10,000 million and any balance of the first $5000 million was to be made before May 1, 1921, in bonds bearing interest at the annual rate of 2½ per cent from 1921 to 1925 and 5 per cent plus 1 per cent for amortization thereafter. If the Reparation Commission believed that Germany could pay a larger sum an additional $10,000 million of 5-per cent bonds was to be issued by Germany.

The articles on reparations under Part VIII of the Treaty of Peace, read:

Section I

General Provisions

Article 231

The Allied and Associated Governments affirm and Germany accepts the responsibility of Germany and her allies for causing all the loss and damage to which the Allied and Associated Governments and their nationals have been subjected as a consequence of the war imposed upon them by the aggression of Germany and her allies.

Article 232

The Allied and Associated Governments recognize that the resources of Germany are not adequate, after taking into account permanent diminutions of such resources which will result from other provisions of the present Treaty, to make complete reparation for all such loss and damage.

Article 233

The findings of the Commission as to the amount of damage defined as above shall be concluded and notified to the German Government on or before May 1, 1921, as representing the extent of that Government's obligations.

The Commission shall concurrently draw up a schedule of payments prescribing the time and manner for securing and discharging the entire obligation within a period of *thirty years* from May 1, 1921. If, however, within the period mentioned, Germany fails to discharge her obligations, any balance remaining unpaid may, within the discretion of the Commission, be postponed for settlement in subsequent years, or may be handled otherwise in such manner as the Allied and Associated Governments, acting in accordance with the procedure laid down in this Part of the present Treaty, shall determine.

Article 234

The Reparation Commission shall after May 1, 1921, from time to time, consider the resources and capacity of Germany, and, after giving her representatives a just opportunity to be heard, shall have discretion to extend the date, and to modify the form of payments.

Article 236

Germany further agrees to the direct application of her economic resources to reparation as specified in Annexes, III, IV, V, and VI, relating respectively to merchant shipping, to physical restoration, to coal and derivatives of coal, and to dyestuffs and other chemical products; provided always that the value of the property transferred and any services rendered by her under these Annexes, assessed in the manner therein prescribed, shall be credited to her towards liquidation of her obligations under the above Articles.

Article 237

The successive instalments, including the above sum, paid over by Germany in satisfaction of the above claims, will be divided by the Allied and Associated Governments in proportions which have been determined upon by them in advance on a basis of general equity and of the rights of each.

Article 238

In addition to the payments mentioned above Germany shall effect, in accordance with the procedure laid down by the Reparation Commission restitution in cash of cash taken away, seized or sequestrated, and also restitution of animals, objects of every nature and

securities taken away, seized or sequestrated, in the cases in which it proves possible to identify them in territory belonging to Germany or her Allies.

ANNEX I

Compensation may be claimed from Germany under Article 232 above in respect of the total damage under the following categories:

(1) Damage to injured persons and to surviving dependents by personal injury to or death of civilians caused by acts of war, including bombardments or other attacks on land, on sea, or from the air.

(7) Allowances by the governments of the Allied and Associated Powers to the families and dependents of mobilised persons or persons serving with the forces.

(10) Damage in the form of levies, fines and other similar exactions imposed by Germany or her allies upon the civilian population.

ANNEX II

12

(a) Whatever part of the full amount of the proved claims is not paid in gold, or in ships, securities and commodities or otherwise, Germany shall be required, under such conditions as the Commission may determine to cover by way of guarantee by an equivalent issue of bonds, obligations or otherwise, in order to constitute an acknowledgment of the said part of the debt.

(b) In periodically estimating Germany's capacity to pay, the Commission shall examine the German system of taxation, first, to the end that the sums for reparation which Germany is required to pay shall become a charge upon all her revenues prior to that for the service or discharge of any domestic loan, and secondly, so as to satisfy itself that, in general, the German scheme of taxation is fully as heavy proportionately as that of any of the Powers represented on the Commission.

(c) In order to facilitate and continue the immediate restoration of the economic life of the Allied and Associated countries, the Commission will take from Germany by way of security for and acknowledgment of her debt a first instalment of gold bearer bonds.

(1) To be issued forthwith, mk. 20,000,000,000 gold bearer bonds, payable not later than May 1, 1921, without interest.

(2) To be issued forthwith, further mk. 40,000,000,000 gold bearer bonds, bearing interest at 2½ per cent per annum between 1921 and 1926, and thereafter at 5 per cent per annum with an additional 1 per cent for amortisation beginning in 1926 on the whole amount of the issue.

(3) To be delivered forthwith a covering undertaking in writing to issue when, but not until, the Commission is satisfied that Germany can meet such interest and sinking-fund obligations, a further instalment of mk. 40,000,000,000 gold 5-per cent bearer bonds, the time and mode of payment of principal and interest to be determined by the Commission. *Further issues by way of acknowledgment and security may be required as the Commission subsequently determines from time to time.*

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The measures which the Allied and Associated Powers shall have the right to take, in case of voluntary default by Germany, and which Germany agrees not to regard as acts of war, may include economic and financial prohibitions and reprisals and in general such other measures as the respective governments may determine to be necessary in the circumstances.

ii. *The Hythe Conference*

At the conference between Premiers Lloyd George and Millerand at Hythe on May 16, 1920, certain tentative proposals were put forward. A lump sum, 120 billion gold mk., about $28,560 million, was to have been fixed as the minimum German indemnity and payments of the inter-Allied war debts were to be made when and as Germany paid instalments on the indemnity. The Allies were to make a loan to Germany provided the United States guaranteed the loan, and France expected American bankers to discount her portion of the German indemnity. The Hythe conference announced as its aim "to arrive at a settlement which shall embrace the whole body of the international liabilities left as a legacy of the war and which shall insure a parallel liquidation of the inter-Allied war debt." The failure of the United States government to participate at the conference set at nought the proposals for inter-Allied financial co-operation.

iii. *Boulogne and Spa Conferences*

At the conference at Boulogne on June 21–22, 1920, the plan for parallel liquidation of inter-Allied debts and reparations claims was discarded, the distribution of the indemnity was not fixed, and no amount was agreed upon. A French proposal provided for a total of 269,000 million gold marks, payable in 42 years in instalments. In view of the fact that the Reparation Commission was empowered to vary the interest and that the Allies would have to borrow at high rates for reconstruction purposes, a rate of 8 per cent was taken in the calculations. Allowing 8 per cent for interest and 1 per cent for amortization, the present value would be 85,000 million gold marks. At the Brussels meeting of the Premiers on July 2, 1920, the discussion was based on a figure of 120,000 million gold marks at present value. At the Conference

at Spa, Belgium, on July 17, 1920, a revised distribution was finally put into effect, under which the indemnity was allocated as follows:

	Per cent
France	52
Great Britain	22
Italy	10
Belgium	8
Roumania, Servia, Poland	6½
Japan and Portugal	1½
Total	100

iv. *Paris Conference*

On January 27, 1921, the first day of the Paris conference, M. Doumer, French Minister of Finance, named 212,000 million gold marks as the French estimate of the total amount of the German indemnity. Mr. Lloyd George very clearly pointed out the impossibility of realizing any such figure. However, before the conference was over the Allied premiers approved the reparations figures amounting to 226,000 million gold marks, payable in 42 years, in instalments of mk. 2000 million annually for the first two years, mk. 3000 million annually for the next three years, mk. 4000 million annually for the three following years, mk. 5000 million annually in 1929, 1930 and 1931, and mk. 6000 million annually from 1932 to 1962. In addition Germany was to pay for 42 years an annual tax of 12 per cent on her total exports. Article 4 of the Reparations Note handed to Germany prohibited the German federal, state or municipal authorities from borrowing money abroad without the approval of the Reparations Commission. All the assets and revenues of the empire and of the states was to be applicable to insure execution of the arrangements. The proceeds of the German customs was to constitute special security.

The very high figure which was then agreed upon by the British and French premiers cannot be justified from any economic standpoint. The French established the amount not because they expected the Germans to pay it but because it enabled them to postpone for a little longer the breaking of the news to the French public that it was impossible for Germany to take over the burden of taxes from the French people. The British approved this high

sum not because they expected it would be paid but in order to preserve Allied unity. These figures have a touch of statistical metaphysics about them. M. Doumer outdid Jules Verne.

v. *German Proposals*

In their counter proposals in London on March 1, 1921, the Germans offered to pay reparations of 50,000 million gold marks, from which they deducted 20,000 million gold marks approximately, covering property surrendered, leaving a balance due the Allies of 30,000 million gold marks.

Toward the end of April, 1921, these counter proposals were submitted in modified form in a note to President Harding for transmission to the Allies. The summary of the note follows:

Germany fixed her total liability at 50,000 million gold marks, and proposed to issue an international loan, the proceeds of which were to be put at the disposal of the Allies. Germany would pay according to her capacity, in labor or other forms of wealth and in annual instalments such sums as were not covered by the international loan. Germany further agreed to permit the Allies to benefit from her economic progress. The annual payments would therefore be of varying amounts depending upon Germany's increasing capacity to pay. Regarding the reconstruction of the devastated territories as the most urgent need, Germany offered to reconstruct any towns or villages specified or to cooperate by supplying labor and raw materials. As an evidence of good faith Germany agreed to place at the disposal of the Reparations Commission 1000 million gold marks, consisting of 150 million gold marks in foreign bills and 850 million gold marks in Treasury notes, redeemable within three months in foreign exchange or foreign securities. Subject to the wishes of the United States and of the Allies, Germany agreed to assume the Allied obligations to the United States. As security for the credits granted her, Germany agreed to pledge her public revenues and properties. As prerequisites for the carrying out of these terms, Germany requested the annulment and release of all other obligations under the Treaty and of German private property in foreign countries, the discontinuance of the system of penalties and the elimination of all unproductive expenditures imposed upon her by the Allies and the restoration of freedom in international commerce.

vi. *Final Terms Accepted by Germany*

On May 10, 1921, the German Reichstag by a fair majority accepted the terms of the proposals submitted by Lloyd George in London on May 5, 1921. These final proposals were based on the German counter proposals as a minimum and, depending upon the recovery of Germany, provided for increasing payments which might exceed the terms laid down in Paris at the end of January, 1921. As summarized by Lloyd George in his address to the House of Commons on May 5, the final proposals provided for the issue of 3 series of bonds which were respectively a first, second and third lien. The first bonds, series A, amounted to 12,000 million gold marks, to be delivered by July 1, 1921, bearing interest at the rate of 5 per cent per annum and accumulating 1 per cent as a sinking fund. The second, or series B bonds, amounted to 38,000 million gold marks, to be delivered by November 1, 1921. The series C bonds, estimated at 82,000 million gold marks, were to be delivered by November 1, 1921, with the important reservation that the Reparations Commission was to attach the coupons and issue these bonds only as and when it was satisfied that the payments to be made under the agreement were adequate to provide for interest and sinking fund. The Reparations Commission was to decide from time to time as to the capacity of Germany to pay and issue additional bonds accordingly. The total amount of the reparations was therefore 132,000 million gold marks. Six per cent of this amount payable annually would be 7,920 million gold marks. A fixed sum of 2,000 million gold marks was to be paid annually, but in addition a variable sum added to it which should be equal to 26 per cent of German exports. Whether that sum will be higher or lower than the Paris proposals depends upon German prosperity. If German exports do not improve these annual payments will be considerably less than that provided under the Paris proposals. If German exports rise to pre-war levels this sum will approximately equal the Paris proposals. If Germany prospers, the annual sum may exceed that provided under the Paris proposals. At bottom, under the new scheme Germany's annual liabilities will vary according to her capacity to discharge them.

With respect to the interest on the bonds, under the Treaty Germany was debited with interest at 5 per cent upon the whole

debt. But under the terms fixed in London the unissued bonds, Series C, bore no interest. Under the final terms 25 per cent of the exports are to be devoted to the payment of interest and amortization on the bonds issued. Any balance remaining plus an additional 1 per cent on the exports are to be devoted to the payment of interest upon the unissued bonds. Above these available amounts the interest will not be debited to Germany and will not accumulate as a liability.

The London agreement further resembles the German counter proposals of March, 1921, in that a payment of 1000 million gold marks is stipulated, payable in gold or 3 months foreign bills or Treasury bills endorsed by German banks. Furthermore, Germany is to pay in kind—in coal, aniline dyes and reconstruction material. The remaining source of payments is a duty of 26 per cent on German exports collected either in Germany or in the country importing the goods. A fund of foreign bills will thus be created.

A Committee on Guarantees, operating under the Reparations Commission, will sit in Berlin for the purpose of supervising the collection of the 26 per cent. Its powers will be restricted to supervision and control and the receipt of payment, but will not authorize interference in German internal administration. The receipts from taxes and materials in kind will be pledged for the payment of interest and amortization on the bonds issued. Like the German counter proposals the London proposals provide for the pledging of other German revenues as security for payment of interest on the bonds.

The final terms proposed by the Allies and accepted by Germany are lower than the proposals at Paris; the minimum terms are approximately equal to those offered by Germany itself. The minimum provisions may be within the capacity of Germany to pay. The elastic provisions providing for an increase in payment depending upon German recovery, are fair both to Germany and to the Allies, particularly since the unissued bonds, representing about 60 per cent of the maximum amount of the reparations, are to bear no interest unless the export tax provides the funds. J. M. Keynes, the spokesman for a just treaty, said of the London terms, that "the decision of the Reparations Commission that Germany's total liability under the Treaty amounts to 132,000 million gold marks, inclusive of the sums due before May 1, 1921,

and inclusive also of Germany's liability for the Belgian debt to the Allies, is a signal triumph for the spirit of justice." The provision for 3 series of bonds, which constitute a first, second and third lien add to the negotiability of the bonds and make it more possible than under any previous indemnity proposals to distribute the bonds to the private investors of the world.

D. Method of Payment

i. *Surrender of Property*

The estimates of property surrendered to France by Germany were given in a German report on the execution of the terms of the Treaty of Versailles, submitted to the Reparations Commission. The value of goods delivered by Germany under the reparations clauses up to December 31, 1920, amounted to 21,176 million gold marks.[4] Section A included the merchant marine, valued at 7310 million marks, railway equipment at mk. 1589 million, and lesser amounts of coal and coke, animals, dyes and agricultural machinery, or a grand total of 10,307 million gold marks. Section B included federal and state property valued at 4482 million gold marks, German property left in the invaded territories valued at 2498 million gold marks, and the Saar mines, valued at 1057 million gold marks, as well as ocean cables, or a total of 8130 million gold marks. Section C, or expenses incurred in accordance with Article 235 of the peace treaty, included German imports of foodstuffs and raw materials judged essential by the Reparations Commission, amounting to 2250 million gold marks and expenses of the army of occupation and of the inter-Allied commissions amounting to 490 million gold marks.

In a note of February 26, 1921, to the German Government, the Reparations Commission estimated the value of property surrendered by Germany under the treaty at less than mk. 8000 million, in contrast to the German estimate of mk. 21,176 million.

ii. *Payment in Kind*

A commission of German engineers was allowed by the Supreme Council of the Peace Conference to report on a scheme

[4] Frankfurter Zeitung, Jan. 19, 1921.

for rebuilding northern France with German materials, German labor and under German superintendence. In view of the difficulty of payment in cash German negotiations to pay in kind continued throughout 1920. This method was advocated in France in a modified form by M. Seydoux of the Ministry of Finance. French firms were to order goods from Germany and pay for them in certificates issued by the French Reparation Bureau and paid into German banks authorized by the German government to receive them.

Payment in kind is more just. The disadvantage that has been urged against it was that from the French point of view, Germany would not pay to the maximum of her capacity but only to the extent of the demands for reconstruction.

However, at a meeting in Paris on March 21, 1921, the Confédération Générale du Travail declared itself in favor of having Germany pay in kind. In view of the shortage of French labor and the inevitable delay in repairing the damage, the delegates from the devastated regions, particularly, favored the plans, for they wanted their homes rebuilt, they cared not by whom. The plan would mitigate the fiscal difficulties of France. The extraordinary budget could be reduced or eliminated and France would not have to float further large loans for reparation purposes. The basic justice of the plan, the concrete application of international ethics, vindicates this proposal on rational and moral grounds.

After months of discussion, M. Louis Loucheur, the French Minister of the Liberated Regions and Walther Rathenau, the German Minister of Reconstruction, reached an agreement on the question of payment in kind, and the terms were signed at Wiesbaden, October 6, 1921. The agreements provided the methods whereby Germany shall supply materials for the reconstruction of the devastated areas in northern France. The transactions will be consummated between organizations created by the French and German governments. The French organization will centralize the demands of all the people of the devastated districts and list the nature and amounts of goods required for reconstruction. The French organization will give the orders and the German organization will in turn distribute them among the German manufacturers and dealers. For goods received the inhabitants of the devastated areas will pay indemnity warrants or monies to the French organization, which in turn will pay in bonds or otherwise

to the German organization. The latter will then settle with the private German manufacturers and dealers. Arbitration on questions of specifications, deliveries, prices and transportation is provided for by means of a commission, one member of which is appointed by the President of the Swiss Federation. France will credit Germany to the extent of 1000 million gold marks per annum against the part of the reparations payment due to her.

The official text of the agreement reads as follows:

> "Germany engages to deliver to France upon her demand all machinery and materials which would be compatible with the possibilities of production in Germany and subject to her limitations as to supplies of raw materials. Such deliveries will be in accord with the requirements necessary for Germany to maintain her social and economic life. This agreement shall date from October 1, 1921.
>
> "In any case the present contract excludes the products which it is specified Germany must turn over to the Allies in Annexes 3, 5 and 6, Part VIII of the Treaty of Versailles (referring to deliveries of ships, coal and dyes). The cumulative value of the payments in kind which Germany will supply France in execution of Annexes 3, 5 and 6, as well as deliveries Germany makes to France under the present contract, will not exceed 7,000,000,000 gold marks from October 1, 1921, to May 1, 1926.
>
> "It is expressly stipulated that all deliveries shall be devoted to the reconstruction of devastated regions in Northern France."

To protect the interests of the other Allies, Germany will never be credited with a sum greater than France's yearly share in the reparations.

The advantages of the plan are evident. Although cash payments by Germany would be preferable to goods as a relief to French finances, cash promised is less tangible than commodities delivered. France is thus assured annual reparations payments. Furthermore, France is able to reduce, if not eliminate, the section of the budget, "Recoverable from Germany Under the Treaty of Peace," and thus enabled to stabilize her finances. Again, the inhabitants of the devastated regions receive prompt aid in the rebuilding of their homes. Finally, France can divert material

and labor from the rebuilding of Northern France to reestablishing her foreign trade. On the other hand, Germany is relieved from the need of finding huge amounts of foreign bills, from straining her industry for the purpose of "dumping" exports, and is relieved from military threats should she be unable to accumulate sufficient foreign currencies. The parties at a disadvantage are the French contractors who would profit on the slow rebuilding of Northern France; furthermore the other Allies might receive a smaller share of the reparations payments than the French.

iii. *Negotiable Bonds*

By November 1, 1921, and under the terms accepted, Germany handed to the Reparation Commission negotiable bonds in payment of the indemnity. Payment in such a form was necessary because the rebuilding of the devastated territory could not be postponed for 30 years, when the last instalment would have fallen due. Reconstruction in France must be carried on promptly. The plan was that the Entente should guarantee the German indemnity bonds which could then be negotiated in countries supplying raw materials.[5] The advantage was that the guarantor powers, as well as France, would have an interest in the recovery of Germany. On the other hand, Professor Gustav Cassel in his memorandum stated that unless the indemnity was fixed at a moderate figure and that unless economic freedom was granted to Germany the discounting of indemnity bonds would prove an unworkable proposal, for as he stated, the name of a bankrupt does not strengthen any paper, nor would anyone wish to be an executor or a partner of a bankrupt.[6]

In accordance with the terms of Article V of the Allied ultimatum accepted by Germany on May 10, 1921,

> "Germany will pay within twenty-five days of this notification 1,000,000,000 gold marks in gold or approved foreign bills or in drafts at three months on the German Treasury, endorsed by approved German banks and payable in London, Paris, New York or any other place designated by the

[5] Brussels Financial Conference, Papers No. XII, p. 80, by André Sayous: Paper No. XIII, p. 6, Charles Gide, p. 45, Gustav Cassel.

[6] Jenny, Frederic, Comment mobiliser la dette allemande. Revue Politique et Parliamentaire, May 10, 1920, pp. 170–180.

> Reparations Commission. These payments will be treated as the first quarterly instalments of the payments provided for in compliance with Article IV (1)."

On May 17, 1921, Germany turned over to the Reparations Commission the equivalent of 150 million gold marks, to be applied against the 1000 million due. The payment consisted of gold and the currency of several countries. On May 28, 1921, the German government sent to the Reparations Commission 20 three-months Treasury bills of 10 million dollars each (equivalent to about 840 million gold marks) of which 80 million dollars was payable in New York, 60 million dollars in London and 60 million dollars in Paris. The bills were endorsed by the large German banks. Originally it was stipulated that the Treasury bills should be in dollars, but the conversion into dollars of the several currencies accumulated by Germany caused a marked depreciation in the European exchanges. As a result, on June 28, 1921, the Reparations Commission decided that payment might be made in European currencies instead of dollars, in which the initial payments were made. The Commission announced its decision as follows:

> "So as to avoid disturbance of the exchange market the Commission on Reparations has given permission that for the month of June and as a trial, payments by Germany should no longer be made in dollars, but in European currencies.
>
> "This decision has been made possible through the action of certain allied powers, which have consented to assume the risks of exchange with respect to certain different currencies and for definite amounts."

Germany effected settlement by paying silver, gold and foreign bills, the latter in some cases secured by the pledge of silver. The government accumulated gold by offering 260 paper marks for every 20-mark gold piece. The first shipment of silver from Germany was received in New York by the Equitable Trust Company toward the end of July, 1921. The first shipment of gold from Germany was received by J. P. Morgan and Company toward the end of August, 1921. Part of the payment was also in the form of American paper money, spent in Germany by American soldiers. However, the main part of the fund was obtained by Germany through the sale of exchange, or the purchase of

dollars. The operations were carried on in New York by the Equitable Trust Company, Guaranty Trust Company, Hallgarten and Company, and Speyer and Company, and abroad by the Rothschilds and the London branches of the Equitable Trust Company and of J. and W. Seligman and Company. These foreign bills arose in part from credits which Germany negotiated in Holland, Denmark, Sweden, Switzerland the United States and England.

E. Criticism

i. *Inability to Pay*

But even within the scope of the treaty there are limitations on Germany's ability to pay. The treaty provides that the sums "for reparation that Germany is required to pay shall become a charge upon all revenues prior to that for service or discharge of and domestic loan."[7] Yet there is a difference between payment in marks on internal war loans and payments in francs on account of the indemnity. Marks are current in Germany but cannot be used for payment elsewhere, unless there is a demand for marks to pay for German goods or services. In other words, the maximum sum that Germany can pay is the capitalized value of a series of annual payments equal to her excess of exports. Keynes demonstrated that the approximate maximum sum that Germany can pay is 35,000 million gold marks if she is allowed to develop an adequate excess of exports. Under conditions in 1921, she can reduce her imports only by under-consumption. As for the Paris proposals of 226,000 million gold marks, Mr. Keynes estimates that if Germany was to develop an excess of exports sufficient to pay the enormous indemnity instalments amounting to 6000 million gold marks per annum after 1932, the reaction on the trade and industry of the world would be incalculable.[8]

The indemnity payments proposed at Paris have been translated in terms of working hours by Walter Rathenau of the German General Electric Company. To pay 6000 million gold marks annually Germany would either have to reduce her annual consumption to about one-quarter of the pre-war level or extend the working time for industrial laborers from 8 to 14 hours per day.

[7] Annex II, Art, 12, paragraph b.
[8] Manchester Guardian, Jan. 31, 1921.

Neither of these conditions could have been carried out over the contemplated period of 30 years.

Again, the indemnity might be regarded as sums collected from the individual taxpayer for the purposes of employing labor in the manufacture of unpaid exports. To raise 2000 million gold marks or about 24,000 million paper marks would seem rather difficult in view of the fact that the existing deficit is over 70,000 million paper marks. According to Brailsford, Germany cannot under the existing circumstances pay the indemnity, "even if the whole population dispensed with coffins and wore no grave clothes."

Since the indemnity can be paid only by means of an excess of exports, the Allies should foster German foreign trade, if they mean to collect their claims. To obstruct German export would curtail or extinguish the source of indemnity payments. Of course the German papers emphasized this aspect. In the words of the German Foreign Minister, Dr. Simons, "If the Allies expect an enormous indemnity, they should direct the German exports toward the eastern markets. But instead, they are frustrating German negotiations with the eastern states. The indemnity problem can be solved only if, instead of ideas of punishment, the ideas of solidarity are placed in the forefront."[9]

Can Germany pay the amounts required under the proposals finally accepted? To meet interest and amortization charges on 50,000 million gold marks Germany will have to pay 3000 million gold marks per annum. If German exports in 1921 are 4000 million gold marks, she would have to pay the fixed sum of 2000 million gold marks, plus 26 per cent of the total exports. This sum would equal the 3000 million gold marks required to pay interest and amortization. The interest and amortization on the entire 132,000 million gold marks would amount to 7920 million gold marks per annum and the exports necessary to produce this sum would have to be about 23,000 million gold marks. In other words, to meet the minimum charges Germany would have to export 4000 million gold marks per annum. To meet the maximum charges Germany would have to export 23,000 million gold marks.

Undoubtedly, Germany cannot meet the requirements of the maximum reparations payments. In order to pay the minimum of 3000 million gold marks per annum Germany would have to have

[9] Associated Press dispatch, Stuttgart, Feb. 13, 1921.

exports of 4000 million gold marks and imports of only 1000 million gold marks. For whatever the fixed sum or the tax rate may be, Germany can pay only in foreign bills resulting from an excess of exports. Whether exports can equal 126 percent of imports plus 2000 million gold mk. is doubtful. Before the war Germany had exports of about 10,000 million gold marks and an excess of imports of about 1500 million gold marks. By restricting luxury imports and luxury consumption, Germany should be able to pay a good part of the minimum annual payments imposed. Whether she can pay it all depends upon a great many political factors, which it is impossible now to foresee. A spirit of moderation on the part of the Allies may be the most prudent way of advancing their own interests.

ii. *Inability to Receive Payment*

It is difficult not only for Germany to pay the huge indemnity but also for the other countries to receive it. In order to have an excess of exports, Germany must reduce her imports and lower her standard of living to a level bordering on starvation. Under such conditions, Germany would be able to underbid the manufacturers in other countries, in which a higher standard prevailed. A tariff against German goods might protect the home market. Consequently, German goods would be driven to overseas markets, and the export trade of Great Britain, France, and the other Allies would be displaced in competition with sweated German labor. The only possible condition under which the other countries could hope to meet German competition would be by a corresponding reduction in the standard of living. British and French labor would have to pay the penalty, if the German indemnity should be made possible, not only because Germany would have to reduce her imports and thus close her markets to foreign goods, but also because she would have to increase her exports and thus either shut off the export products of British and French labor or else drag it down to her own unlivable level.[10]

[10] Brailsford, H. N., Indemnities and Unemployment, New Republic, Mar. 23, 1921.
Dulles, John Foster, The Reparation Problem, *ibid.*, March 30, 1921.
Hobson, J. A., The German Indemnity; A British View, The Nation (N. Y.) March 9, 1921.

In the resolutions adopted at a meeting of the Parliamentary Committee of the Trades Union Congress and the Executive Committee of the British Labor Party on February 17, 1921, the unemployment then prevalent in Great Britain was ascribed to the so-called suicidal foreign policy. "The indemnity terms demand an immense tribute from German industry which must reduce the capacity of the German population to consume our goods. We shipped directly last year to the German, Russian, and Austro-Hungarian ports less than one-tenth of what we sent them in 1913. That decrease alone would account for most of the present unemployment. The indemnity can be paid only in exports of goods which do not call for any goods in return by way of payment. That means further disturbance of British industry. Swamping the world's markets with what are virtually prison-made goods will confront British workers with an unprecedented form of competition."

Two years' experience after the signing of the peace treaty has indicated that the Allied powers do not wish to receive goods from Germany. In spite of the fact that the Allies in 1919 insisted upon terms in the treaty which would give them all the ships that Germany owned and could build, the Allied reparation experts recommended in 1921 that Germany cease to deliver any further tonnage and that some already delivered be returned to Germany. As for coal deliveries, England has constantly insisted that the German coal delivered to France should not underbid British coal, and thus give French industry an advantage. Upon the resumption of operation of the French coal mines, France will probably take the same attitude toward German coal deliveries as Great Britain took toward German shipping deliveries. Up to 1921 none of the Allies had exercised the option under the Treaty of Peace of accepting machinery from Germany, except in insignificant quantities. The same difficulty applies to the other categories specified in the treaty. The Allies do not want German goods gratis. Nor is any other power likely to consent to be a party to a triangular transaction, whereby Germany may pay the reparation claims of the Allies.

The indemnity must be reduced not only to the amount that Germany is able to pay, but also to the amount that the Allies are willing to receive.

iii. *Cost of Reparation*

As an alternative proposal to the payment of a definite amount by Germany, France could consent to reduce the indemnity to the actual cost of reparation; that is, Germany would cease to pay any indemnity after the work of restoration was completed. An official French statement shows that up to the end of 1920 about 78.5 per cent of the industries in the devastated area were reconstructed, as well as 60 per cent of the highways, 80 per cent of canal and water ways, and practically the entire railroad mileage.[11] The amount spent for reconstruction was less than 35,500 million paper francs, approximately equivalent to $2400 million. It is very likely that $4000 million, at present value, will amply cover the reconstructed needs of France. The agreement to have indemnity payments cease after the rehabilitation is completed will do much to restore the will to work in Germany, upon which the economic revival of France and of all Europe depends. The reporter of the Finance Committee of the French Senate estimated on April 10, 1921, that the cost of reconstruction, yet to be done was at pre-war valuation about 26,000 million gold francs.

F. Conclusion

The history of the changes in the successive proposals for settling the indemnity shows a growing spirit of moderation and a regard for the realities of the situation. Under the original terms specified in the treaty, provision was made for the discharge of the entire obligation within 30 years from May, 1921, and the amount fixed was far beyond Germany's capacity to pay. In view of the indeterminate amount of the indemnity, the reparations provisions of the treaty failed of their purpose because no standard of capacity to pay was specified, and the German people had neither the incentive nor the means of paying such indeterminate amounts. The German government was then invited to submit such terms as seemed reasonable and within its capacity. However, the discrepancy between the German offer and the Allied expectations blocked this attempt to find common ground. The terms

[11] Fortnightly Survey of French Economic Conditions, vol. II, Jan. 10, 1921. Pub. by French Commission in New York.

agreed upon in May, 1921, fixed an amount, but divided it into three parts, on the largest of which the interest payments were conditional and the new bonds had no definite maturity date. The terms of the treaty called for annual payments of the equivalent of about 2000 million dollars. The Allied ultimatum of May, 1921, called for annual payments of about 500 million dollars, plus 26 per cent of Germany's exports. But the May, 1921, program suffers from the defect that the greater her ability to pay the greater will be the penalty imposed, and as Germany's capacity to pay rises the burden will be shared by the United States and Great Britain, the two manufacturing countries who compete with Germany in foreign markets. The history of the reparations terms indicates that a further moderation is to be expected after a fair test, in which Germany continues to give evidence of her good faith.[12]

Germany completed the payment of the 1000 million gold marks due on August 31, 1921. However, in spite of the cynical gibe at Keynes on the part of one of the metropolitan dailies, Germany already is giving evidence of the tremendous financial strain. Perhaps a crash will follow if the terms in the Allied ultimatum are carried out. For according to tentative estimates, based on the probable volume of exports of Germany, the payments for the year ending August, 1922, will aggregate about one billion dollars. Payments up to the end of August, 1921, were made through the sale of marks, through bank credits, and exports of silver and of gold. In all responsible quarters there is an attitude of watchful waiting and even of skepticism as to Germany's ability to continue payment. Some authorities believe that default is inevitable and that the reparation terms will again have to be modified.

Underlying the controversy over the amount of the indemnity is the fact that in modern wars there are no victors. In the World War even the victors lost. The amount of the indemnity must conform to a few fundamental principles. The burden of France must be lightened. She was the victim of ruthless aggression and she should not be asked to share the reparations payments with countries not devastated. The treaty provides for increasing the taxation in Germany to the level obtaining in Allied countries

[12] See Cravath, Paul D., The Reparation Problem and Germany's Acceptance of the Allied Ultimatum. Issued by Equitable Trust Company of New York, August, 1921.

and should thus achieve this aim. France must be convinced of the desirability in her own interest and that of Europe, of not asking indemnities in excess of the actual cost of rehabilitation. The indemnity was increased by adding the cost of pensions and allowances.[17] By admitting this item, for England as well as for France, the proportion which France receives of the total indemnity was decreased. Her claims were diluted. In the general economic interest as well as to abide by the terms of the armistice, France and England should both waive claims on account of pensions and allowances. Of the remaining portion applicable only to the repair of the devastation, France would receive a larger share. If the Allies abandon the proposal of fixing the indemnity up to the maximum of the capacity of Germany to pay, they are no longer put to the need of fixing a sum so great as will restrict the recovery of Germany. If the Allies content themselves with fixing the indemnity at the net cost of repairing the damage done, they will make Europe a sounder business risk, new loans will be forthcoming, and the recovery of Europe hastened.

[17] These items were added in distinct violation of the armistice agreement, to which the Allies were bound by the signatures of their representatives. To the credit of the American delegates at the peace conference, be it said, they protested against this breach of a treaty obligation as flagrant as Germany's disregard in 1914 of another "scrap of paper." See address at the conference by John Foster Dulles, reprinted in Appendix to Baruch, B. M., The Reparation and Economic Sections of the Treaty. N. Y. Harpers, 1920.

CHAPTER XVII

THE FOREIGN EXCHANGES

A. The Outlook

The war influenced profoundly the international trade balances of most of the countries of the world. Three typical cases illustrate the varied effects. First, the countries which have abandoned the gold standard will probably repeat historic experience in international trade under depreciated paper. Second, because of the indemnity payable by Germany, her foreign exchange outlook is unique. Third, the position of the United States is the same as that of any of the older countries of Europe after a period of prolonged lending, with this distinction, however, that the change from a debtor to a creditor country took place within four years or less. The position of the United States depends of course upon the payment or cancellation of the loans to the Allies.

i. *The United States: Effect of Investments Abroad*

From July 1, 1914, to December 31, 1918, the excess of exports of the United States was $11,524 million. In the calendar year 1919 it was $4016 million, and in 1920 it was $2949 million, making a total excess of exports for the 6½ years of $18,489 million. This huge credit was offset by the following debits:

Items	Million dollars
Government advances	9500
Gold, securities returned, freights, immigrants' remittances	4000*
Private loans	2500†
Estimated balance or open credits	2500‡

* Estimates of Bullock, Williams and Tucker, in the Harvard Review of Economic Statistics, *ibid.*

†Estimates of Bullock, et al., 1600 million up to Dec. 31, 1918, and Journal of Commerce record of the loan flotations after the armistice.

‡ Estimate of B. M. Anderson, Jr., is 3500 million dollars.

According to Bullock and his associates the pre-war net annual debit of the United States was $160 million and at the end of 1918 the net annual credit balance of the United States was $525 million. Since then government loans of about $2400 million were advanced and foreign loans of about $750 million were sold to the public. Assuming an average rate of interest of 5 per cent the annual credit balance as of December 31, 1920, should be about $675 million. However, the deferment of the interest on government advances will cause a reduction of about $450 million annually.

In view of the breakdown of the credit of the European countries this annual credit balance of the United States will not be offset by imports into the United States. Temporarily, therefore, until Europe is restored, the United States must continue to lend. At the time they are made loans constitute a debit of the United States, whose effect is to reduce the annual credit balance. Ultimately the interest on these additional loans increases this balance. Interest on government loans must be deferred temporarily at least. Partly because of the necessary excess of imports into the countries of Europe, their exchanges are depreciated and thus constitute a barrier which makes it impossible for them to furnish dollars in payment of interest on United States government loans. The United States Treasury has no need for the foreign currencies in the United States and would not be warranted in accumulating large idle foreign balances. If the Treasury did not defer the collection of interest, the resultant financial difficulties of Europe would check the necessary purchases in the United States.

However, ultimately Europe will have to pay in goods, although probably a larger part of our annual debits than before the war will consist of increased tourist expenditures and further investments. Unless the debts of the Allies are canceled there should be a reversal of the trade balance of the United States. This appears to have been foreshadowed by the trade changes in 1920. Although our exports increased from $7920 million in 1919 to $8228 million in 1920, our imports increased to a greater extent, from $3904 million in 1919 to $5279 million in 1920. Our excess of exports declined from $4016 million in 1919 to $2949 million in in 1920, the lowest figure since the year 1916.

If Europe resumes specie payments the theory of international trade would call for a flow of gold from countries indebted to

the United States. The importation of gold into the United States would result in rising prices, increased imports, and decreased exports. These relations will probably obtain in the trade between Great Britain and the United States sooner than in the case of the countries on the Continent.

ii. *Germany: The Effect of the Indemnity*[1]

The payment of the indemnity by Germany will create a demand in Germany for bills on London, Paris, New York, and other centers, with which to pay France. Marks will therefore depreciate. The price of foreign exchange in Germany will rise more than the price of commodities. The abnormal deviation of the exchanges will create a gap which will stimulate exports and check imports. Under the inconvertible paper régime the exchange fluctuations will be wide, and will be corrected by the movement of goods. Ultimately, as exports increase and imports decrease, the gap between the foreign exchange rates and the price of commodities will gradually disappear.

Germany will be able to pay in goods only. Even though she pays with securities or with mortgages on her plant and equipment, the annual income due to the foreigner can be paid only in goods exported. In fact the total indemnity is nothing other than the capitalized value for a series of years of the annual excess of exports from Germany. The shipment to France of German goods in payment of reparation claims has the same effect as if German labor bodily migrated to France to do the reconstruction work. If Germany pays by means of exports, French labor can turn to reparation work. The result of these operations will be that Germany will ultimately develop an enormous export trade. If she does so the countries receiving the payments will be unable to do likewise during this period. For reasons which will be explained below, the gap between the gold prices of German exchange and of commodities will make of Germany a country of low costs and of hard work, and without luxury expenditures.

[1] Taussig, F. W., Germany's Reparation Payment, American Economic Review Supplement, X:1, pp. 33–49, March, 1920, and discussion by John H. Williams, pp. 50–57. Smith, J. Russell, The American Trade Balance and Probable Tendencies, Annals of the Am. Acad. Pol. and Soc. Sci., Vol. 83, May, 1919.

Countries whose exchange is not abnormally depressed like Germany's will be unable to compete with Germany in neutral markets. The effect will be a lowering of the world's price level as the result of international competition. The receipt of indemnity payments will lead to speculation and other financial disturbances in the indemnity-receiving countries, as was the case in Germany in the 70's. Even though, as J. Russell Smith suggests, the indemnity payments are arranged to decline gradually, at the end of the period of indemnity payments Germany will have a large export trade and the industrial facilities for its successful maintenance. On the other hand the country receiving the indemnity will have relatively small exports and large imports. If England and France do not wish to create this condition, they can avoid it, as Professor Taussig points out, only by not selling the reparation bonds. Once they are sold, the result is inevitable unless Germany defaults on the interest or principal.

The fact that the indemnity payments will necessarily increase Germany's exports may be the explanation for the imposition of the 26-per cent export tax imposed by the Allied premiers in London in the ultimatum of May, 1921. However, to demand indemnity payments in gold and then to tax Germany's exports is analogous to putting a machine into high speed and simultaneously throwing on the emergency brake.

iii. *International Trade Under Depreciated Paper*[2]

In the section on the theory of foreign exchange it was pointed out that in countries on a gold basis or with a gold exchange standard, fluctuations of exchange rates are within narrow limits. In countries on an inconvertible paper basis, and if gold moves freely, fluctuations are wider. The fluctuations are widest of all, if there is an embargo on the exportation of gold, for in this case, exchanges are corrected only by the movement of commodities which are less sensitive to exchange fluctuations than the movement of gold.

The trade changes in paper money countries were illustrated

[2] Williams, John H., Foreign Exchange Prices and the Course of International Trade, Annals Am. Soc. Pol. Sci., No. 178, pp. 207–210, May, 1920. Same author, Argentine International Trade Under Inconvertible Paper. Cambridge: Harvard University Press, 1920, pp. 17–20, 154–155 and 253.

in the Argentine, and more recently in Germany, as explained in the section on German exchange. The essential fact is not that foreign exchange rates and the gold premium move in sympathy and that both move more rapidly than the general price level, but that the depreciation of exchange causes a rise in prices of imported goods or creates a gap between the international price level and the local cost of production. The international price level, which determines the price in depreciated currency of export commodities, corresponds to the premium on gold and rises almost as rapidly as foreign exchange depreciates. However, the elements in the cost of production, such as wages, rent and overhead, are not so sensitive and do not rise so rapidly. Therefore as foreign exchange depreciates the profits in export industries increase. Ultimately the cost of production rises, owing to the increase in the cost of living resulting from increased paper prices of imported essential goods.

The price changes in a country on a paper basis are exactly the reverse of those in a country on a gold basis. In a country on a gold basis, a rise in the rate of foreign exchange results in the exportation of gold and in a lowered price level. Exports are thus stimulated. In a country on a paper basis a rise of foreign exchange results in an increased price for gold, a depreciation of paper and a rise in the price level. But a rise in paper prices stimulates exports. In both a gold and a paper country the outflow of gold lowers the gold price level. In the paper country paper prices rise. Similar causes produce apparently opposite price phenomena and similar trade effects.

B. Correctives

i. *Infeasible Proposals*

Many proposals for rectifying the depreciated exchanges are based on the assumption that depreciated exchange is a cause rather than an indicator of unsound conditions. Many unworkable proposals have been put forward. To level all the differences in the exchanges of the countries of the world would require an equalization of the fiscal and financial conditions of the nations. Exchange rates indicate the relative ratios of gold to note and deposit liabilities, the relative foreign floating debt, the relative

trade balance, and the prospects of a return to financial health.[3] "Pegging," or the continuous funding of an excess of imports of a country whose exchange is depreciated, is possible only if the exporting country is able and willing to extend credit.

The "pegging" of the exchanges of all countries by means of an international clearing house is impossible. Sr. Luigi Luzatti, the Italian economist and former premier, advocated in 1907 and 1916 an international clearing house for foreign exchanges in which trade balances between nations would be adjusted on the same principle as in a clearing house for commercial bankers. Settlement would be effected by means of loans issued and guaranteed in common.[4] To equalize the exchanges would involve the transferring of the burdens from the weak countries to the strong ones.

An equally impracticable suggestion is to establish a moratorium of the exchanges, for the purpose of stabilizing them, and thus facilitating the purchasing of goods by European countries.[5] A moratorium would merely disguise the effects of the disturbing financial and fiscal factors, which cause inequalities in exchange rates; to the extent that this disguise hides the basic evil a moratorium would do harm rather than good. Besides, at what level would stabilization be effected?

The depreciation of exchange resulted in heavy exports into Sweden, Switzerland and the United States from the countries whose exchange was depreciated. In the three countries, as explained in the section on foreign exchange, merchants' associations recommended tariff increases to compensate for the depreciation of the exchanges. In other words, the self-corrective effect of a depreciated exchange would according to these recommendations, be checked. Automatically, the cost of production would normally rise and thus offset the depreciation of exchange and the advantage to the exporter would disappear.

ii. *Financial Correctives*

The foreign exchanges may be corrected by the cessation of inflation and the balancing of the budgets. These factors are

[3] Report of the Secretary of the Treasury for 1919, p. 13, *et seq.*

[4] Rome dispatch, Aug. 7, 1920.

[5] Gardin, John E., Chairman of the International Banking Corporation, in an address to the American Institute of Banking, New York Times, Nov. 21, 1920.

interrelated. The inability to balance the budget made governments resort to increased issues of paper money. Under a regime of inconvertible paper the domestic depreciation of paper in terms of gold has its analogue in a depreciation of exchange rates. When inflation is stopped, it may be possible partly to stabilize the exchange at some low level. This course should ultimately lead to the introduction of a gold-exchange standard in countries with greatly inflated circulation. In countries in which paper is at a slight discount, the cessation of inflation should ultimately lead to a return to gold parity. A large foreign floating debt or a large foreign floating supply of paper money depresses the exchange rate of a country. The funding of the floating debt and the conversion of the foreign-owned currency into a term debt will release the pressure on the exchange market during periods of slight improvement in exchange rates. An increase in the discount rate of the central bank of issue is a prerequisite in checking inflation.

iii. *Trade Correctives*

The countries with depreciated exchange rates must also apply the trade correctives. Imports must be reduced to the minimum. Although depreciated exchange tends automatically to produce this result, it does so indiscriminately. The importation of luxuries by the wealthy depresses the exchange rates and thus raises the price of imported wheat to the masses. The prohibition of luxury imports or the application of priorities makes possible a finer adjustment, less burdensome to the masses, who must pay for imported necessities.

The exportation of gold to correct the exchanges is not feasible during a period of depreciating exchange. Only after exchange is somewhat stabilized is the exportation of gold free from the risk of exhausting the gold reserves of the central bank of issue.

Exchange rates may be corrected by the sale of foreign securities by holders in countries with depreciated exchange rates. However, most of the countries with greatly depreciated exchange rates have no supply of foreign securities to liquidate. Such as there were have largely been sold during the crisis. As an alternative course to selling of securities these countries may raise foreign loans. However, the prerequisites for the floating of foreign loans are the restoration of a balanced budget, the cessation of inflation, and the checking of non-essential imports.

CHAPTER XVIII

THE BRUSSELS FINANCIAL CONFERENCE[1]

The financial chaos in Europe, whose causes have been traced in the preceding chapters, were discussed at the International Financial Conference at Brussels. This body made its own diagnosis and formulated recommendations for both national and international application, to restore economic stability in Europe.

A. The Aim

According to a memorandum published in the United States on January 15, 1920, signed by several scores of bankers and publicists of various countries of the world, the aim of the Conference was to consider what action might be taken to aid in the restoration of normal economic conditions. It was originally called for some time in May, was postponed to July and then to September, and finally met from September 24 to October 8, 1920.[2] Its aim was formulated in a resolution passed by the Council of the League of Nations in February, 1920, to the effect that "the League of Nations shall convene an international conference with a view to studying the international crisis and looking to the means of remedying and of mitigating the dangerous consequences arising from it." But under instruction of the Council of the League of August 5, 1920, "none of the questions which are the subject of

[1] Raffalovich, Arthur, Les Enseignments des Conférences Internationales des Londres et de Bruxelles. Discussions de la Société d'Economie Politique, Economiste Français, Jan. 22, 1921, p. 103.

Jenny, Frederic, La Conférence financière de Bruxelles, Revue Politique et Parlementaire, October 10, 1920, pp. 53–68.

A Summary Report of the Conference, Boston, World Peace Foundation, 1920. Siepmann, H. E., The Brussels Conference, Economic Journal, XXX:120, pp. 436–460, December, 1920. Berridge, S., Harvard Review of Economic Statistics, December, 1920, pp. 349–359.

[2] Annual Report of the Secretary of the Treasury, 1920, pp. 84–86, Report and Resolutions of the International Financial Conference, Brussels, 1920. London: Hodder & Stoughton, 1920.

the present negotiations between the Allies and Germany should be discussed at the Conference."

Stated in greater detail by the Advisory Committee of the Conference, its purpose was (1) to obtain as complete a picture as possible of the situation of the world and by comparison of the situation in the various countries to make it possible to form a judgment as to the importance and difficulty of the problems with which they respectively are faced; (2) by an interchange of opinions and experience to assist each country to arrive at the soundest possible policy for dealing with the difficulties revealed in the survey and to insure that such national policies are not antagonistic; (3) to discuss and formulate schemes to meet those difficulties where national action needs to be supplemented by international agreement.

B. The Diagnosis

The published report of the Conference gives the following review of the situation. Some of the financial difficulties of the world are common to all nations, but the degree and the effects of the disturbances have varied, depending upon the extent of the participation in or influence of the war and the methods of its financing. The total internal debt of the European belligerents is equivalent to about $155,000 million, compared with about $17,000 million in 1913. The government expenditures of the belligerents has increased greatly, as high as 1500 per cent, and the annual expenditures are estimated at 20 to 40 per cent of the national income. In all cases except that of Great Britain, the budget has a large deficit. The belligerents reduced their prewar holdings of gold and increased their paper currencies. The excess of imports greatly increased during the war and even after the armistice. Only during the latter part of 1920 has this condition been checked or reversed. Upon the release of the artificial support of the exchanges of the belligerent countries their rates depreciated very rapidly. As a result of the war new states have been created and others have had their territories profoundly modified. The fiscal machinery is in most cases not yet adjusted to the new conditions, and enormous expenditures are made upon armaments and even war, and upon subsidies for food and for the cost of living.

Even the neutral countries of Europe have been affected. The war caused heavy expenditures and great increase in their debt. Their budget expenditures have been increased by subsidies to the masses to reduce the cost of living. As a result of the belligerent demands for neutral goods and the embargo on imports to neutral countries, they accumulated large holdings of gold which resulted in the expansion of the currency and a rise in prices. Their exchanges rose above par during the war. After the armistice the replenishing of their stocks reversed the trade currents and resulted in the depreciation of their exchanges.

The non-European countries have been least affected. Nevertheless, their economic future depends upon the restoration of the purchasing power of their European customers. Again, the younger countries lack capital for the development of their resources and compete with Europe, which needs funds for the repair of the ravages of war.

Some economic difficulties are common to all the countries of the world. The cost of living has increased, either because of the abandonment of the gold standard or because of the accumulation of excessive gold. International trade has been restricted and diverted from its normal channels. The inability of Europe to supply the overseas countries during the war resulted in the development of new industries and the search for new sources of supply. On the other hand in order to obtain the necessary imports during the war, Europe liquidated her holdings of foreign investments. The resulting instability of the exchanges dislocated trade. In addition, legislative restrictions on trade have been imposed during and since the war. Credits between seller and buyer are curtailed by the very causes which make them necessary.

Viewing the problem primarily from the point of view of production, the war and the subsequent political disturbances and military expeditions have reduced the productivity of Europe, and prevented the accumulation of a social surplus and the increase of capital goods. Through death, wounds and disease, war reduced the total productive capacity of labor and its output was further reduced by political and social disturbances. Similar effects were produced by new national boundaries, new trade barriers, new currency units, and new governments. Production decreased as a result of the instability of exchange rates and prices, arising from unbalanced budgets and excessive note issues.

C. Memoranda Submitted by Economists

In accordance with the aims enunciated above, several prominent economists of Europe were invited to present their views. They submitted independently papers which treated both the diagnosis and the remedies. Their joint statement is given herewith in full:

I. Inflation

1. It is essential that the inflation of credit and currency should be stopped everywhere at the earliest possible moment.

2. To this end, Government spending must be cut down, the conduct of Government enterprise at less than cost and the payment of subsidies on particular commodities and services must as far as possible be abolished, and military and naval expenditure stringently restricted.

3. The equilibrium of state budgets must be restored, loans not being employed to meet ordinary current requirements.

4. Artificially low bank rates out of conformity with the real scarcity of capital, and made possible only by the creation of new currency, must be avoided.

5. Floating debts should, as soon as practicable, be funded.

II. Exchanges

6. The level of the exchanges tends to correspond with the relative internal values of the currencies of the several countries. The serious depression of certain exchanges beneath their real parities would be ameliorated by: (a) The funding of floating debts held abroad in the form of notes; (b) the restoration as soon and as far as practicable of normal trade intercourse between the different countries.

III. International Credits

7. The grant of credit (whether through an international loan or system of guarantees to private lenders or otherwise) to distressed countries must naturally be conditional upon some priority being given to those credits and upon other claims being postponed till those credits have had time to exercise their influence upon production.

8. The grant of credits should be conditional: (a) Upon their being used only for the most immediately remunerative purposes, including the provision of means of subsistence for the laboring population, and (b) upon the borrowing countries doing everything in their power to coöperate in the work of restoring economic life.

9. The capacity of the lending world to grant credits will depend, in great measure, upon the restoration of real peace and normal conditions of international trade.

(Signed) G. Bruins
Gustave Cassel
Charles Gide
M. Pantaleoni
A. C. Pigou

In the light of the recommendations of these economists and of the resolutions of the Conference, subsequently to be discussed, many proposals put forward during the war and after the armistice were regarded as either infeasible or premature. The proposal for the creation of an international currency, the demonetization of gold, the revaluation of gold and the payment of gold miners' subsidies, the establishment of new parities, the creation of an international gold clearance fund or of an international reserve bank, and the funding by international loans of the excess of imports, all must be discarded. The seeking of support from the governments of the richer countries or from an international body delays the convalescense of the financially unsound countries, whose recovery depends upon their own efforts primarily.

The views of the individual economists are of interest.[1] Professor M. Pantaleoni's remedy is the *laissez faire policy*. The stopping of inflation by governments will automatically result in financial stability. Professor Charles Gide emphasises the need for international action such as the cancellation of the inter-Allied debts and the guaranty by the Entente of the German indemnity bonds. Dr. Bruins advocates the cessation of inflation, the increase of bank rates, the funding of floating foreign debt, and the restoration of freedom in commerce as the means of securing stability of currency and exchange. He regards both deflation and the establishment of new gold parities as subjects for future consideration. An international loan is impracticable in his opinion, but he advocates international coöperation to facilitate the extension of private credit under specific guarantees.

Professor Pigou also advocates the cessation of inflation, the funding of foreign floating indebtedness, and the raising of the bank rate. He would then reëstablish an effective gold standard, at the pre-war parity if the depreciation is slight; otherwise at new lower parities. The last step, however, would require the consideration by a commission of financial experts. Exchange can be stabilized only by a free conversion of paper and gold at a fixed

[1] Paper XIII (2) Memorandum prepared for the International Financial Conference by G. W. J. Bruins of Holland. (3) Memorandum of the world's monetary problems by Gustave Cassel of Sweden. (4) Memorandum on Credit currency and exchange fluctuations by A. C. Pigou of Great Britain. (5) Notes on the financial and monetary situation by Charles Gide of France. (6) Memorandum by M. Pantaleoni of Italy.

rate. The prerequisites would be the restoration of the trade balance and the possession of an adequate supply of gold. In international trade, Professor Pigou is opposed to the introduction of a new money of account, but he does advocate, in contrast to Dr. Bruins, bonds issued by an international authority.

Professor Cassel introduces his concept of "purchasing-power parities," which equal the prewar gold parities times the degree of inflation. The prewar exchange parities between two gold countries was the ratio of the gold values of their currencies. But after the war, the "purchasing power parity" in country B of the currency of country A depends on the ratio of the relative rise in prices in B to that in A. That is, the purchasing power in England of the French franc varies directly with rise in British prices and inversely with the rise in French prices.

Applying the theory of "purchasing-power parities," he suggests that the currencies can be stabilized at these levels, unless the restrictions upon foreign trade or the speculative selling abroad of paper money or bills lead to abnormal deviations from the purchasing-power parities. Professor Cassel is opposed to deflation because it would cause hardship to the debtor states and the debtor citizens. The immediate problem is to check inflation and the question of eventual parities cannot be fixed until stability is attained. Professor Cassel is strongly opposed to a new international currency; it would merely complicate the situation, or else would create new purchasing power and thus continue the process of inflation. He is also opposed to large international loans. Loans must be between private individuals in the exporting countries, for productive purposes only and at the high rates current in the lending countries.

D. Policies Recommended

The conference divided its work among four committees, on public finance, on currency and exchange, on international trade, and on international credit. Their recommendations were adopted unanimously by the Conference. These conclusions involved no new principles, but merely a restatement of well known facts. However, in three-quarters of the countries represented at the Conference and in eleven-twelfths of the countries of Europe the budgets did not balance (in the autumn of 1920) and showed no prospect of balancing in the near future. According to statements

presented at the Conference, about 20 per cent, on the average, of the national expenditure was being devoted to armament and to preparation for war. The recommendations of the committees may seem platitudes, but they are specific remedies for the financial ills affecting the European countries.

i. *Condemnation of Impracticable Proposals*

The resolutions point out that some of the proposals submitted were impracticable, and that both nationally and internationally certain economic measures must be abandoned. In addition, positive recommendations were made.

The Conference committee on currency and exchange clearly condemned all attempts to limit fluctuations in exchange by means of artificial control. Such measures disguise the underlying evils and prevent the operation of the self-correctives. The committee was also opposed to fixing the ratio of existing fiduciary currencies to their nominal gold value, because of the impossibility of maintaining this ratio generally unless the economic revival of the several countries had progressed sufficiently to warrant it. Furthermore, the committee doubted the feasibility of stabilizing the value of gold but expressed its willingness to refer the question to a committee to be organized. In addition to rejecting these national measures, the committee also opposed the adoption of an international currency or of an international unit of account, because it would serve no useful purpose and would not remove any of the exchange difficulties.

ii. *The Abandonment of Certain National Policies*

The committee on public finance recommended the abandonment of all artificial measures which gloss over the defective economic situation. Such measures include the subsidies on foodstuffs, on coal and on other elements of the cost of living, the payment of unemployment doles and the maintenance of charges for railway, postal or other government service on a basis insufficient to cover the cost. Again, borrowing by the state for the purpose of covering ordinary current expenditures should cease.

The committee on currency and exchange in its resolutions recommended the abandonment of measures leading to inflation, not however by merely restricting the issue of paper money, but

by removing the causes which make it necessary. Again, the state must abandon its control, for political purposes, of the banks of issue. Instead not only should they cease to create additional credit, but the governments and municipalities should begin to repay or refund their floating debts. The elimination of all superfluous expenditure is the prerequisite to this policy.

iii. *Positive National Policies Recommended*

The committee on public finance in its resolutions pointed out that within each country public opinion must be directed to the cause of the present unsound condition, in order to bring about the adoption of corrective measures. The excessive expenditure of governments is the cause of inflation, of the depreciation of the currency, of the rise in prices and in the cost of living. Therefore, each government must balance its budget, reduce military burdens, abandon all unproductive outlay and restrict even productive extraordinary expenditure to a minimum. Then, as a sequel taxes must be increased until revenue fully equals the ordinary recurrent expenditure. Additional loans for urgent capital purposes must come only out of the savings of the people, and by the same means only must the undigested floating debt be funded. To make these measures possible, production must be increased through the coöperation of all elements of the population. The committee on currency and exchange advocated similar measures and in addition recommended the return to an effective gold standard on the part of those countries which had abandoned it. Countries lacking a central bank of issue should establish one, even if it requires the assistance of foreign capital. Deflation must be carried out gradually and carefully to prevent disturbances to trade and credit. Finally, until the volume of credit can be controlled by a rise or fall in the rate of interest under an effective gold standard, credit priorities should be granted for productive and remunerative enterprises.

iv. *The Abandonment of Certain International Policies*

In addition to these national measures, certain international policies were advocated. The committee on international trade recommended the abandonment of preparations for war and the removal of the atmosphere of war. Similarly, the committee on

international credits stated that the financial markets can function normally only when peaceful relations are restored between all peoples, and the present uncertainty concerning the international financial settlements is removed. The Committee recommended that restrictions on international trade should be eliminated. The committee on international credits did not favor international loans directly by governments, and the committee on currency and exchange did not favor discrimination between foreign and native holders of banknotes or bank balances.

v. *Positive International Policies Recommended*

The committee on public finance reconfirmed the statement of the Supreme Council of the Allied powers to the effect that armaments should be reduced to the lowest possible figure compatible with national security, because the world cannot afford this expenditure. In order that the commerce of each country may be devoted to strictly productive purposes there must be international coöperation for the removal of the crushing burden which armaments impose on the impoverished peoples of the world, sapping their resources and imperiling their recovery from the ravages of war.

Furthermore, according to the recommendations of the committee on international trade, and of the Supreme Economic Council, the states which have been created or enlarged as a result of the war should establish full coöperation and arrange for the unrestricted interchange of commodities in order that the essential unity of European economic life should not be impaired by the erection of artificial economic barriers. However, the improvement of the general economic situation will require a considerable period of time and in the present circumstances it is impossible for certain countries to restore their economic activity without borrowing abroad for periods which exceed the normal term of commercial credit. But, this assistance can be accorded only to those countries which are prepared to coöperate internationally in the restoration of their economic life. (The one thoroughly feasible proposal on international credits of Ter Meulen, a Dutch banker, member of Hope & Co., is treated more fully elsewhere in this book. See p. 652.) These ends may be accomplished by giving publicity to the situation of the public finance of each state

and therefore it was recommended that all the nations should furnish the Council of the League with budget estimates and corresponding accounts of receipts and expenditures.

E. Text of the Resolutions Adopted

The following abstracts from the resolutions adopted unanimously by the conference give the principal recommendations:

Resolutions of the Committee on Public Finance

I

Thirty-nine nations have in turn placed before the International Financial Conference a statement of their financial position. The examination of these statements brings out the extreme gravity of the general situation of public finance throughout the world, and particularly in Europe.

Their import may be summed up in the statement that three out of every four of the countries represented at this Conference, and eleven out of twelve of the European countries, anticipate a budget deficit in the present year. Public opinion is largely responsible for this situation.

The close connection between these budget deficits and the cost of living, which is causing such suffering and unrest throughout the world, is far from being grasped. Nearly every government is being pressed to incur fresh expenditure; largely on palliatives which aggravate the very evils against which they are directed.

The first step is to bring public opinion in every country to realize the essential facts of the situation and particularly the need for reëstablishing public finances on a sound basis as a preliminary to the execution of those social reforms which the world demands.

II

Increase of production

Public attention should be especially drawn to the fact that the reduction of prices and the restoration of prosperity is dependent on the increase of production, and that the continual excess of government expenditure over revenue represented by budget deficits is one of the most serious obstacles to such increase of production, as it must sooner or later involve the following consequences:—

(*a*) Further inflation of credit and currency.

(*b*) A further depreciation in the purchasing power of the domestic currency, and a still greater instability of the foreign exchanges.

(*c*) A further rise in prices and in the cost of living.

The country which accepts the policy of budget deficits is treading the slippery path which leads to general ruin; to escape from that path no sacrifice is too great.

III

Restriction of expenditure

It is therefore imperative that every government should, as the first social and financial reform, on which all others depend:—

(*a*) Restrict its ordinary recurrent expenditure, including the service of the debt to such an amount as can be covered by its ordinary revenue.

(*b*) Rigidly reduce all expenditure on armaments in so far as such reduction is compatible with the preservation of national security.

(*c*) Abandon all unproductive extraordinary expenditure.

(*d*) Restrict even productive extraordinary expenditure to the lowest possible amount.

IV

Reduction of armaments

The Supreme Council of the Allied powers in its pronouncement on the 8th March declared that "Armies should everywhere be reduced to a peace footing, that armaments should be limited to the lowest possible figure compatible with national security, and that the League of Nations should be invited to consider, as soon as possible, proposals to this end." The statements presented to the Conference show that, on an average, some 20 per cent of the national expenditure is still being devoted to the maintenance of armaments and the preparations for war.

The Conference desires to affirm with the utmost emphasis that the world cannot afford this expenditure. Only by a frank policy of mutual co-operation can the nations hope to regain their old prosperity; and in order to secure that result the whole resources of each country must be devoted to strictly productive purposes.

The Conference accordingly recommends most earnestly to the Council of the League of Nations the desirability of conferring at once with the several governments concerned, with a view to securing a general and agreed reduction of the crushing burden which, on their existing scale, armaments still impose on the impoverished peoples of the world, sapping their resources and imperilling their recovery from the ravages of war. The Conference hopes that the Assembly of the League which is about to meet will take energetic action to this end.

V

Abandonment of artificial measures

While recognizing the practical difficulties in the way of immediate action in all cases, the Conference considers that every government should abandon at the earliest practicable date all uneconomical and artificial measures which conceal from the people the true economic situation; such measures include:

(*a*) The artificial cheapening of bread and other foodstuffs, and of coal and other materials by selling them below cost price

to the public, and the provision of unemployment doles of such a character as to demoralize instead of encouraging industry.

(*b*) The maintenance of railway fares, postal rates and charges for other government services on a basis which is insufficient to cover the cost of the services given, including annual charges on capital account.

VI

Further taxation necessary

In so far as, after every effort has been made, it is impossible to cut down expenditure within the limits of existing revenues, fresh taxation must be imposed to meet the deficit, and this process must be ruthlessly continued until the revenue is at least sufficient to meet the full amount of the recurrent ordinary expenditure. The Conference considers that the relative advantages of the various possible means of increasing the national revenue, whether by direct or indirect taxation or by a capital levy (to be devoted to the repayment of debt), depend upon the special economic conditions obtaining in each country, and that in consequence each country must decide for itself on the methods which are best suited to its own internal economy.

VII

Cessation of borrowing

If the above principles are accepted and applied, loans will not be required for recurrent ordinary expenditure; borrowing for that purpose must cease. In a number of countries, however, although the ordinary charges can be met from revenue, heavy extraordinary expenditure must at the present time be undertaken on capital account. This applies more especially in the case of those countries devastated during the war, whose reconstruction charges cannot possibly be met from ordinary receipts. The restoration of the devastated areas is of capital importance for the re-establishment of normal economic conditions; and loans for this purpose are not only unavoidable but justifiable. But in view of the shortage of capital it will be difficult to secure the sums required even for this purpose, and only the most urgent schemes should be pressed forward immediately.

VIII

Fresh loans met out of savings

The means by which loans are raised are no less important than the purposes for which they are destined. In future the loans which are required for urgent capital purposes must be met out of the real savings of the people. But those savings have, as it were, been pledged for many years ahead by the credits created during the war, and the first step to raising fresh money must be to fund the undigested floating obligations with which the markets are burdened.

These principles apply both to internal and to external borrowing, and in regard to the latter we suggest that it would be in the general interest for the creditor countries to give such facilities as may be possible to the debtor countries to fund their floating obligations at the earliest possible date. . . .

X

Strict application necessary

The Conference is of opinion that the strict application of the principles outlined above is the necessary condition for the reëstablishment of public finances on a sound basis. A country which does not contrive as soon as possible to attain the execution of these principles is doomed beyond hope of recovery. To enable governments, however, to give effect to these principles, all classes of the community must contribute their share.

Industry must be organized as to encourage the maximum production on the part of capital and labor, as by such production alone will labor be able to obtain those improved conditions of life which it is the aim of every country to secure for its people.

All classes of the population, and particularly the wealthy, must be prepared willingly to accept the changes necessary to remedy the present situation.

Above all, to fill up the gap between the supply of and the demand for commodities, it is the duty of every patriotic citizen to practise the strictest possible economy and so to contribute his maximum effort to the common weal. Such private action is the indispensable basis for the fiscal measures required to restore public finances.

Resolutions of the Committee on Currency and Exchange

The currency of a country, in the sense of the immediate purchasing power of the community, includes (*a*) the actual legal tender money in existence, and (*b*) any promises to pay legal tender, *e. g.*, as bank balances—which are available for ordinary daily transactions.

The currencies of all belligerent, and of many other countries, though in greatly varying degrees, have since the beginning of the war been expanded artificially, regardless of the usual restraints upon such expansion . . . and without any corresponding increase in the real wealth upon which their purchasing power was based; indeed in most cases in spite of a serious reduction in such wealth. . . .

The effect of it has been to intensify, in terms of the *inflated* currencies, the general rise in prices, so that a greater amount of such currency is needed to procure the accustomed supply of goods and services. Where this additional currency was procured by further "inflation" (*i. e.*, by printing more paper money or creating fresh credit) there arose what has been called a "vicious spiral" of constantly rising prices and wages and constantly increasing inflation, with the resulting disorganization of all business, dislocation of the exchanges, a progressive increase in the cost of living, and consequent labor unrest.

I

Therefore:

It is of the utmost importance that the growth of inflation should be stopped, and this, although no doubt very difficult to do immediately in some countries, could quickly be accomplished by (1)

abstaining from increasing the currency . . . and (2) by increasing the real wealth upon which such currency is based.

The cessation of increase in the currency should not be achieved merely by restricting the issue of legal tender. . . . It is necessary to attack the causes which lead to the necessity for the additional currency. . . .

II

Governments must limit their expenditure to their revenue. . . .

III

Banks, and especially Banks of Issue, should be freed from political pressure and should be conducted solely on the lines of prudent finance. . . .

IV

The creation of additional credit should cease and governments and municipalities should not only not increase their floating debts, but should begin to repay or fund them by degrees.

In normal times the natural and most effective regulator of the volume and distribution of credit is the rate of interest which the central Banks of Issue are compelled, . . . to raise when credit is unduly expanding. It is true that high money rates would be expensive to the governments which have large floating debts, but we see no reason why . . . the government should be less subject to the normal measure for restricting credit than the individual members of the community. In some countries, however, the financial machinery has become so abnormal that it may be difficult for such corrective measure to be immediately applied. We recommend, therefore, that—

V

Until credit can be controlled merely by the normal influence of the rate of interest, it should only be granted for real economic needs. . . .

The complementary steps for arresting the increase of inflation by increasing the wealth on which the currency is based, may be summed up in the words: increased production and decreased consumption. . . .

Yet, in our opinion, the production of wealth is in many countries suffering from a cause which it is more directly in the power of governments to remove, viz., the control in various forms which was often imposed by them as a war measure and has not yet been completely relaxed. . . .

VI

Commerce should as soon as possible be freed from control, and impediments to international trade removed. . . .

VII

All superfluous expenditure should be avoided.

To attain this end, the enlightenment of public opinion is the most powerful lever. If the wise control of credit brings dear money, this result will in itself help to promote economy. . . .

VIII

It is highly desirable that the countries which have lapsed from an effective gold standard should return thereto. . . .

IX

It is useless to attempt to fix the ratio of existing fiduciary currencies to their nominal gold value; as, unless the condition of the country concerned were sufficiently favorable to make the fixing of such ratio necessary, it could not be maintained.

The reversion to, or establishment of, an effective gold standard would in many cases demand enormous deflation and it is certain that such—

X

Deflation, if and when undertaken, must be carried out gradually and with great caution; otherwise the disturbance to trade and credit might prove disastrous.

XI

We cannot recommend any attempt to stabilize the value of gold and we gravely doubt whether such attempt could succeed. . . .

XII

We believe that neither an international currency nor an international unit of account would serve any useful purpose or remove any of the difficulties from which international exchange suffers to-day.

XIII

We can find no justification for supporting the idea that foreign holders of bank notes or bank balances should be treated differently from native holders.

XIV

In countries where there is no central bank of issue, one should be established, and if the assistance of foreign capital were required for the promotion of such a bank, some form of international control might be required.

XV

Attempts to limit fluctuations in exchange by imposing artificial control on exchange operations are futile and mischievous. In so far as they are effective they falsify the market, tend to remove natural correctives to such fluctuations and interfere with free dealings in forward exchange which are so necessary to enable traders to eliminate from their calculations a margin to cover risk of exchange, which would otherwise contribute to the rise in prices. . . .

We support the suggestion that—

XVI

A committee should be set up both for continuing the collection of the valuable financial statistics that have been furnished for this Conference and also the further investigation of currency policy.

RESOLUTIONS OF THE COMMITTEE ON INTERNATIONAL TRADE

I

The International Financial Conference affirms that the first condition for the resumption of international trade is the restoration of real peace, the conclusion of the wars which are still being waged, and the assured maintenance of peace for the future. The continuance of the atmosphere of war and of preparations for war is fatal to the development of that mutual trust which is essential to the resumption of normal trading relations. The security of internal conditions is scarcely less important, as foreign trade cannot prosper in a country whose internal conditions do not inspire confidence. The Conference trusts that the League of Nations will lose no opportunity to secure the full restoration and continued maintenance of peace.

II

The International Financial Conference affirms that the improvement of the financial position largely depends on the general restoration as soon as possible of good-will between the various nations; and in particular it endorses the declaration of the Supreme Council of the 8th March last "that the States which have been created or enlarged as a result of the war should at once reëstablish full and friendly coöperation, and arrange for the unrestricted interchange of commodities in order that the essential unity of European economic life may not be impaired by the erection of artificial economic barriers."

III

The Conference recommends that, within such limits and at such time as may appear possible, each country should aim at the progressive restoration of that freedom of commerce which prevailed before the war, including the withdrawal of artificial restrictions on, and discriminations of price against, external trade. . . .

VI

The International Financial Conference expresses the conviction that the repair, improvement and economical use of the transport systems of the world, and particularly of countries affected by the war, are of vital importance to the restoration of international trade.

Resolutions of the Committee on International Credits

I

The Conference recognizes in the first place that the difficulties which at present lie in the way of international credit operations arise almost exclusively out of the disturbance caused by the war, and that the normal working of financial markets cannot be completely re-established unless peaceful relations are restored between all peoples and the outstanding financial questions resulting from the war are made the subject of a definite settlement which is put into execution.

II

The Conference is, moreover, of opinion that the revival of credit requires as primary conditions the restoration of order in public finance, the cessation of inflation, the purging of currencies, and the freedom of commercial transactions. The resolutions of the Commission on International Credits are therefore based on the resolutions of the other commissions.

III

The Conference recognizes, however, that this general improvement in the situation requires a considerable period of time, and that in present circumstances it is not possible for certain countries to restore their economic activity without assistance from abroad. This assistance is required for periods which exceed the normal term of commercial operations.

IV

The Conference is of opinion that in principle the resources out of which this assistance is to be provided should be found from the savings of the lending countries and must not result in undue increase of the fiduciary circulation—that is to say, in the creation or extension of a disproportion between means of payment and the genuine requirements of business. . . .

VI

The Conference does not believe that, apart from particular decisions dictated by national interests or by considerations of humanity, credits should be accorded directly by governments.

VII

It appears to the Conference that one of the chief obstacles to the granting of credits is the absence in borrowing countries of sufficient security for ultimate repayment. The Conference therefore studied with attention in the light of the general considerations enumerated above, all the proposals presented with a view to creating guarantees which would provide satisfactory security for exporters.

The Conference has been forced to recognize that no single system could by itself suffice to provide for the many different needs of the various countries, and that it is necessary to indicate a series of measures sufficiently elastic to be adapted afterwards to every variety of circumstances.

For these reasons the Conference decided to make the following recommendations:

VIII

An international organization should be formed and placed at the disposal of states desiring to have resort to credit for the purpose of paying for their essential imports. These states would then notify the assets which they are prepared to pledge as security for the sake of obtaining credit, and would come to an understanding with the international organization as to the conditions under which these assets would be administered.

The bonds issued against this guarantee would be used as collateral for credits intended to cover the cost of commodities.

A plan based upon these principles . . . has been devised to enable states to facilitate the obtaining of commercial credits by their nationals. It is easy to see that the scheme is susceptible of development in various directions, and that some of its provisions might be adapted so as to facilitate the extension of credit direct to public corporations.

A committee of financiers and business men should be nominated forthwith by the Council of the League of Nations for the purpose of defining the measures necessary to give practical effect to this proposal.

IX

It has been represented to the Conference that more complete results might be achieved if the bonds used as collateral were to carry some international guarantee.

The Conference sees no objection to the further consideration of this proposal. . . .

X

It has also been represented to the Conference that an extension on international lines of the existing system of export credit insurance would in many instances be of great value in developing trade with countries where political and social conditions give rise to an anxiety which is often exaggerated by exporters. The Conference believes that an extension of this kind is worthy of consideration, and that it should be examined in detail by experts.

XI

The attention of the Conference has been called to the present system of "finishing credits," that is to say, of credits under which a lien in favor of the exporter or a banker is maintained on the raw material in all its different stages and upon the proceeds of the manufactured article. This system has suffered greatly owing to the lack, in many countries, of sufficient legal protection for the exporter throughout the various stages of importation, manufacture, re-exportation and sale. The Conference would suggest that the Council be recommended to draw the attention of the different governments to this question, and to summon an advisory body of legal experts and business men to specify the legislative action which it would be desirable to take in order to attain the desired object in each of the countries concerned.

XII

Apart from the above-mentioned proposals which the Conference recommends the League of Nations to adopt, and if possible to apply in practice, the Conference believes that the activities of the League might usefully be directed towards promoting certain reforms, and collecting the relevant information required to facilitate credit operations. In this connection the Conference considers it well to draw attention to the advantages of making progress under each of the following heads:

(1) Unification of the laws relating to bills of exchange and bills of ladings;

(2) The reciprocal treatment of the branches of foreign banks in different countries;

(3) The publication of financial information in a clear, comparative form;

(4) The examination of claims by the holders of bonds the interest on which is in arrear;

(5) An international understanding on the subject of lost, stolen or destroyed securities;

(6) The establishment of an international clearing house;

(7) An international understanding which, while ensuring the due payment by everyone of his full share of taxation, would avoid the imposition of double taxation which is at present an obstacle to the placing of investments abroad.

XIII

During the course of its deliberations the Conference could not fail to be impressed by the fact that all, or almost all, of the many

proposals submitted for its consideration require at some stage the active intervention of the League of Nations. The Conference is unanimously in sympathy with this tendency, and believes that it is desirable to extend to the problems of finance that international co-operation which the League of Nations has inaugurated, and which it is attempting to promote in order to improve the general situation and maintain the peace of the world.

F. An Appraisal of the Conference

Before the meeting of the Brussels Conference, extravagant expectations of its possibilities were entertained. One of the neutral papers anticipated that it would furnish suggestions to bring about a decline in prices, another referred to the possibility of stabilizing exchange and arriving at a settlement of the question of indemnities. A German daily expected that it would lead to an international loan to provide Germany with foodstuffs and raw materials. Sir George Paish hoped that it would draft a plan to meet the world's economic and financial difficulties resulting from the war. Like some magic fairy wand, the Conference was to fulfill the wishes of each of the nations. On the other hand, some of the earlier appraisals underrated its potentialities. As a matter of fact, the bankers of the world expected but little from it, for unlike any of the important international gatherings during 1919 and 1920, it caused no fluctuations in exchange rates, a sure test of its practical significance.

In its own official statement, the International Financial Conference at Brussels gave a reasonably accurate estimate of its work. "Whatever may be the future of our positive proposals, the Conference cannot have been in vain. It has been a gathering unique in the history of the world, not of statesmen working in the interest of their particular countries, but of experts from all nations working for the solution of the common problem of the whole world. . . . A spirit of close and intimate coöperation, such as might scarcely have been thought possible, developed. That coöperation is not itself a factor of the utmost importance. Some of the recommendations of the Conference may appear axiomatic. Their adoption, however, would mean a fundamental change in the policies of the great majority of the European countries. The members of the Conference call special attention to the way in which representatives of 39 countries, representing about 75 per cent of the population of the world, have been able, through a fortnight's

discussion, to arrive at a general agreement as to the features of the world's financial position and to some of the most important measures urgently required for its restoration. They have been able to give to their suggestions the force of collective and unanimous recommendations."

As a result of the Conference the Council of the League of Nations established a provisional Economic and Financial Committee, to collect and disseminate information and to take steps toward carrying out its recommendations. Subsequently, the new Committee on International Credits was established and a conference of bankers, merchants and insurance men was held in London to discuss the question of export credit insurance.

The estimate by the Conference of its work is moderate and probably correct. The clear statement of the difficulties, and the prestige attaching to its unanimous recommendations cannot fail to lead to measures in the right direction in each country, as well as internationally.

CHAPTER XIX

INTERNATIONAL LOANS FOR THE RESTORATION OF EUROPE [1]

A. The Need for International Loans

As a result of the facility with which inter-government loans were negotiated during the war, the European countries desired their continuance after the war. Several important financial authorities, among others Sir George Paish, Professor Charles Gide, and Luigi Luzzatti, pleaded for loans by the United States government. However, the sentiment against further government loans was crystallized in the early part of 1920. Mr. Herbert Hoover, on January 6, 1920, stated, "I emphatically disagree with the statements circulated by European propagandists that our Treasury must supply further large loans. The problem is one of ratification of peace and ordinary business processes and not one of increasing our burden of taxation. . . . The world needs to get away from the notion of governmental help both internal and external, and get back to work and peace." [2] On January 28, 1920, Secretary Carter Glass expressed similar unequivocal opposition to government loans.[3] "Such things as international guarantees and international measures for the stabilization of exchange are utterly impracticable, so long as there exist inequalities of taxation and domestic financial policies in the various countries involved. It is unthinkable that the people of a country which has been called upon to submit to so drastic a program of taxation as that adopted by the United States should undertake to remedy the inequalities of exchange resulting from a less drastic policy of domestic taxa-

[1] Jenny, Frederic, Les crédits internationaux. Revue Politique et Parlementaire, Dec. 10, 1920, pp. 353-370.

[2] Federal Reserve Bulletin, February, 1920, pp. 140–141.

[3] Letter to Homer L. Ferguson, President of the Chamber of Commerce of the United States of America. Federal Reserve Bulletin, February, 1920, pp. 137–139. Also Annual Report Secretary of the Treasury, 1920, pp. 80–84.

tion adopted by the other governments of the world. . . . The consequences of the world's greatest war are profound and inescapable. . . . The process of healing the wounds inflicted by the war must necessarily be slow and painful. . . . We must depend upon the independent activity of each person affected to repair his own fortunes, with the assistance of his business connections in other countries, and also upon each individual to return to a normal life of industry and economy." About a year later, Premier Lloyd George took a similar attitude. "Everybody wanted the government to assume the whole risk of the establishment of credits, but that was unfair because it was the risk of the taxpayer."[4] Nevertheless, loans of some kind there must be, for in central and eastern Europe hundreds of millions of people suffer from under-consumption and on the other hand the countries which are the sources of supply of food and raw materials are suffering from overproduction. Aside from social maladjustments and political difficulties, the prime need of Europe is credit until its peoples are in a position to restore the normal bases of financing their imports.

B. The Prerequisites and Conditions of International Loans

International loans are not the first step in the restoration of Europe. Other more fundamental requirements must be met. The governments of Europe must stop fighting and cease preparation for war, must balance their budgets, check unnecessary imports, fund the foreign floating debt, and coöperate in a friendly spirit both in the settlement of the international difficulties arising out of the war and in the resumption of the peaceful processes of trade.[5]

The Supreme Economic Council, in a statement on March 8, 1920, summed up these prerequisites in a concise manner. "Firstly, it is of paramount importance that business conditions should be fully restored throughout the world at the earliest possible moment. Secondly, not only the governments of each country but all those

[4] Address in the House of Commons, Feb. 17, 1921.

[5] Declaration by Supreme Council of the Peace Conference on the Economic Conditions of the World, March 8, 1920. British White Paper [Cmd 646]. Jenny, Frederic, Le Memorandum Economique, Revue Politique et Parlementaire (avec texte) April 10, 1920, pp. 49-79.

engaged in production everywhere should give attention to those measures which will contribute to the full resumption of peaceful industry, to the encouragement of a better output on the part of the workers, and to the improvement of machinery and the means of transportation. Thirdly, each country should urge upon its nationals the vital necessity of suppressing extravagance and reducing expenditure, so as to bridge the gap which must for some years exist between the demand for and the supply of essential commodities. Fourthly, it is essential that early steps should be taken to secure the deflation of credit and currency."

Until the German indemnity is fixed at such a figure as will assure European peace and economic productivity, budgets will not balance, the depreciation of exchange will not be arrested, and international credit cannot be established on a sound basis.

After these prerequisites shall have been attended to by the borrowing governments and peoples, private credits may safely be extended. However, the granting of new loans to Europe will be subject to certain conditions which the lenders have the right to insist upon. Europe is staggering under the burden of war debts, both internal and external. In addition, the defeated powers have huge reparations claims to pay. Additional credit for Europe will not be forthcoming unless it has a priority over all previous claims, including reparations claims. One of the surest ways of preventing the recovery of Europe would be the enforcement of Article IV of the Reparations Note of January 29, 1921, which reads, "Germany shall not directly embark in any credit operations outside of her own territory without the approval of the Reparations Commission." Europe to-day is virtually if not formally insolvent, and therefore to obtain new credits it must submit to the same conditions that a bankrupt corporation accepts in order again to become a going concern. Receivers' certificates which have a prior claim over all other indebtedness are frequently the means of restoring a bankrupt corporation. New loans to Europe will have to partake of the nature of receivers' certificates. As such these loans will have to be free from taxation in the country of the borrower and be guaranteed by his government. In order to increase the probability of payment new loans must be made on a business basis; to attract funds in a competitive market they must be at the prevailing interest rate. There must be a priority in the allocation of funds to the most remunerative enterprises, both to insure the

safety of the interest of the lender and to hasten the recovery of the borrower. The machinery of international credit must not be cumbersome, and it must not involve any international liability, international guaranty, or international government.

C. Proposed Types of Loans

After the armistice speculation was rife concerning the types of international loans that would be necessary for the reëstablishment of trade. Government loans, private loans, loans by the League of Nations, loans to France against the reparations claims, and loans to the Central Powers under the terms of the treaty are but a few of the types into which the proposals may be classified.

According to the original memorandum of January 15, 1920, recommending the calling of a conference, the views of the signatories were inclined toward government loans in principle but opposed to it in the form recommended.

> "The signatories submit that, while much can be done through normal banking channels, the working capital needed is too large in amount and is required too quickly for such channels to be adequate. They are of opinion therefore that a more comprehensive scheme is necessary. It is not a question of affording aid only to a single country, or even a single group of countries which were allied in the war. The interests of the whole of Europe and indeed of the whole world are at stake.
>
> "It is not our intention to suggest in detail the method by which such international cooperation in the grant of credit may be secured. But we allow ourselves the following observations:
>
> "1. The greater part of the funds must necessarily be supplied by those countries where the trade balance and the exchanges are favorable.
>
> "2. Long-term foreign credit, such as is here contemplated, is only desirable in so far as it is absolutely necessary to restore productive processes. It is not a substitute for those efforts and sacrifices on the part of each country by which alone they can solve their internal problem. It is only by the real economic conditions pressing severely, as they must, on the individual that equilibrium can be restored.
>
> "3. For this reason, and also because of the great demands on capital for their own internal purposes, in the lending countries themselves, the credit supplied should be reduced to a minimum absolutely necessary.
>
> "4. Assistance should as far as possible be given in a form which leaves national and international trade free from the restrictive control of governments.

"5. Any scheme should encourage to the greatest extent possible the supply of credit and the development of trade through normal channels.

"6. In so far as it proves possible to issue loans to the public in the lending countries, these loans must be on such terms as will attract the real savings of the individual, otherwise inflation would be increased.

"7. The borrowing countries would have to provide the best obtainable security. For this purpose it should be agreed that:

"(a) Such loans should rank in front of all other indebtedness whatsoever, whether internal debt, reparation payments or inter-Allied governmental debt.

"(b) Special security should be set aside by the borrowing countries as a guarantee for the payment of interest and amortization, the character of such security varying perhaps from country to country, but including in the case of Germany and the new states the assignment of import and export duties payable on a gold basis, and in the case of states entitled to receipts from Germany, a first charge on such receipts."

The subjects, barter as a substitute for international credit, the establishment of trade clearing houses or barter institutes, and the compilation of lists of goods in surplus and goods in demand have been treated elsewhere in this book. The subject of refining credits, or the furnishing of raw materials to a manufacturer under a trustee arrangement and the return by him of a portion of the finished goods, were discussed at the Conference.[6] However, the possibilities of both barter and of refining credits are limited. As was pointed out by a prominent European banker, "The clearing house for commodities, which has been suggested for the barter of goods between two countries, is impossible, since it could only work by resorting to trade monopolies and government control. Barter could only be conducted on a small scale by individual firms in Germany with individual foreign firms."[7] Trade unionists have objected to the plan of refining trade credits on the ground that labor in the country consuming the finished goods must compete with the underpaid and undernourished workers of the impoverished countries of Europe. On the other hand, labor in the latter countries has objected to being sweated for the benefit of the foreign manufacturer.

[6] International Financial Conference, Paper XII, scheme of Herr Meinl, pp. 13–18. Also Paper XIII, (2), G. W. G. Bruins, pp. 20–21.

[7] Warburg, Max M., Restoration of German Exchange. Address at the Annual Convention of the German Bankers Association, October 26, 1920.

i. *Loans by Governments or an International Body*

From the time of the armistice until the Brussels Financial Conference numerous proposals were put forward for loans by governments, by the League of Nations, or by an international body which was to be created.

(a) *Keynes' Proposal*—

In concluding his remedies for the disorganization resulting from the peace, J. M. Keynes [8] advocated a large loan by the neutrals, the United Kingdom, and the United States, to provide credits for the countries of continental Europe. He set a figure of $1000 million. "The aggregate sum reequired might not be so large as is supposed." In spite of the precedent established by the cancellation of the inter-Allied war debt, the new loan should be extended "with the unequivocal intention of its being repaid in full," as if the war debts were not so contracted. To insure this end he advocated a strong security, and the priority of the new money ahead of all reparations claims, the inter-Allied war debt, and internal war loans. Countries entitled to reparation payments should be required to pledge such receipts to the repayment of the new loan, and all the borrowing countries should be required to pledge their customs receipts to the service of the new loan.

(b) *Paish's Proposal*—

In 1919 and 1920, Sir George Paish repeatedly made the proposal that the most effective method of dealing with the European situation was by means "of a coöperative effort of the most comprehensive character." He suggested that the credit of the League of Nations be pledged "for the payment of food, raw materials or manufactured goods which the nations may supply to each other at the present time and for which they are unable to obtain payment in goods or in other products.[9] . . . An issue of League of Nations bonds free from taxation in all countries and enjoying good markets in every country of the world would enable the present situation to be effectively dealt with and the peril to

[8] The Economic Consequences of the Peace, pp. 283, 288, American edition.

[9] Paish, Sir George, The World Breakdown, Annals of the Acad. Soc. and Pol. Sci., May, 1920, pp. 225 and 226.

Europe to be safely overcome." This League of Nations loan would be for about $25,000 million, an amount needed to repair the war damages, to fund the foreign debts of the Allied Powers and to reorganize the currency and finances of Russia. Of this amount the United States was to contribute 20 per cent, or $5000 million, Great Britain another 20 per cent, and the remainder would be distributed among the other powers of the world. These bonds would also be used in the settlement of international trade debts and would therefore be helpful in stabilizing exchange rates."[10]

(c) *Vanderlip's Proposal*—

The basic thesis of Mr. Vanderlip's proposal was that the European situation must be treated as a whole, and a comprehensive loan was the prerequisite to restore industry in the European countries. His scheme[11] did not contemplate loans by governments, but rather by private investors. One formula was to apply to all the borrowing countries. Very strong security would have to underlie the loan, and the lenders would determine in advance the basis of the apportionment among the several nations. As a condition of the loan, the lenders should insist that the entire proceeds should be devoted to productive enterprises and not to the fiscal needs of the government. The participants in this international loan were to be the United States, Japan, the leading neutral countries, and perhaps Great Britain. The governments of the lending nations would appoint a group of bankers and each country would appoint a member to an international loan commission, whose duties would be to determine the proportionate distribution of the total loan to each borrowing country and also to decide what goods were to be furnished. As security each borrowing nation would pledge a first lien upon the customs revenue to meet its share of the international loan.

Mr. Vanderlip opposed the rediscounting of indemnity claims against Germany upon the part of the lending countries. On the other hand Professor Charles Gide, contemplated that the Allied governments would guarantee the German indemnity bonds which were to be issued to the war-ravaged countries, who would rediscount them and secure funds immediately.

[10] Hibbert Journal, July, 1919.
[11] Vanderlip, F. A., What Happened to Europe. Macmillan's, 1919.

(d) *Proposals of Delacroix and Pigou*—

The plans submitted by M. Delacroix, Belgian Prime Minister and Minister of Finance, and Professor A. C. Pigou, of England, are similar in type. The scheme of M. Delacroix provided for the establishment of an international bank, which would issue interest-bearing gold bonds in exchange for pledged securities. All states would be represented on the board of directors, which would decide whether the securities offered were satisfactory and whether the borrowing state could furnish adequate guarantees. With these world bonds the borrowing countries could obtain immediately funds for the purchase of essential goods. The security offered might be the customs duties of the government or the mineral or farm products of the country, or any source of revenue whereby the bonds might be redeemed.[12]

Professor A. C. Pigou quoted with approval the plan of M. Delacroix, for the issue by an international authority of bonds secured by the collateral of the borrowing government and guaranteed by the international authority. The borrowing government would sell these bonds to the public at the market price. However, Professor Pigou would impose several conditions. The criteria justifying loans would be the urgency of need in case of loans for purposes of consumption, and the profitableness of the enterprise in the case of loans for purposes of production. The borrowing country must not export capital in any form. It must control foreign exchange transactions and check luxury imports. It must sell its goods at world prices, otherwise in cases of greatly depreciated exchange the borrowing country would be wasting its resources.[13] Again, the borrowing government must not use the borrowed funds for military purposes. It must balance its budget and cease inflating its currency. Finally, the loans would be in gold and not in depreciated paper, and if held by foreigners would have to be exempt from taxation in the borrowing country, and

[12] International Financial Conference, Brussels, 1920, Paper XII (1), Proposal for the Establishment of an International Bank, pp. 3–12. See also Verbatim Report of the Debates, Vol. II, pp. 108–114.

[13] It is interesting to note that Professor Cassel takes precisely the opposite view. He would remove all forms of government interference, particularly artificial control of export prices, because of the resulting abnormal deviation of foreign exchange and the impediment to its stabilization.

rank in priority ahead of other debts of the borrowing government.[14]

(e) *Proposals of Thalbitzer and Vissering*—

M. Carl Thalbitzer, a Danish financial authority and editor of *Finans Tidende,* proposed a scheme which involved both barter and refining credits, as well as an international bank, international bonds, and an international unit of account.[15] The possibilities of barter were limited to cases, in which both countries could reciprocally fill each other's needs. Refining credits might afford a less narrow solution. In fact, the *veredelungsverkehr,* or refining trade was for years an established form of traffic between Belgium or Switzerland and the large neighboring countries, except that before the war payments for the refining or finishing process were in drafts and under the post-war form payment was in raw materials.

However, Thalbitzer's main proposal was for the establishment of a double system of clearing houses, one of which would develop international trade by means of barter and refining credits and the other would create a new financial standard for the settlement of international accounts. The whole scheme would be under the direction of the League of Nations. The clearing house for goods would receive reports from the several governments stating both their needs for goods and their surplus. In case of a world shortage the League of Nations would provide for rationing. By this means the exchange of goods could be effected without the issue of credits. In order to effect a settlement an international unit of account would be necessary. For this purpose and also to facilitate the granting of credit a Bank of the League of Nations would be established. Its principle function would be to maintain in relation to gold the par value of the international unit of account, the *league,* somewhat similar to the Chinese tael, the bank florin of the Amsterdamsche Wisselbank, or the mark banco of the old Bank of Hamburg. In addition, the Bank would issue international bonds free from interest, payable in the unit of account, and finally would grant credit by means of these bonds on the recommendations of the commodities clearing house. As

[14] International Financial Conference, Paper XIII (4), pp. 3–7.

[15] International Financial Conference, Paper XII (6), The International Financial Problem, pp. 30–35. The Economic Review, July 16, 1920.

with the bank proposed by Delacroix, the capital would be contributed by the several countries, in proportion to population or national wealth, and would be payable in cash or in instalments, the contributor paying interest and amortization on the unpaid balance. However, against the unpaid balance the Bank might issue bonds free from interest and for which all the states would be jointly and severally liable.

The proposal of Dr. G. Vissering, President of the Bank of the Netherlands, is somewhat similar to the Thalbitzer scheme, in that he advocates the organization of barter institutes or commodity clearing houses, the creation of a new unit of account to avoid the vagaries of exchange, and international coöperation for granting large credits.

Both the Thalbitzer and the Vissering plans would involve unnecessary government interference. Instead of setting off the formidable lists of goods required and of surplus available, the same results could be obtained without any international machinery by a national system of priority certificates for imports, the control of export prices, and the earmarking of exports for the payment of imports.[16]

ii. *Private Loans*

The fundamental difficulty of the proposals listed above is that they require too large a capital, that government interference is involved, that a powerful international authority is essential, and that there is no close relation between the time and amount of the credit needs of the borrower and the raising of the sums by the lender.

(a) *The Views of Professor Cassel—*

Professor Cassel indicates additional difficulties. The problem of reconstruction is primarily a revival of work within the impoverished country, and means the restoration of order, of hard work, of industrial organization, and of private enterprise. Only until exports can be developed adequately to furnish food and raw materials, is it necessary to draw upon foreign credit. International loans can only be made from daily savings in the lending

[16] Vissering, G., International Economic and Financial Problems. London: Macmillan, 1920.

country and not from its accumulations of capital. Therefore, ideas of huge world loans must be abandoned. International loans must be limited to financing the current excess of exports from the lending to the borrowing country. Capital is scarce the world over, and interest rates are high in all countries, except where an artificial money market is maintained. Therefore for an additional reason the amounts of foreign loans must be limited to current savings. Demands for goods or credit must be reduced and prorated on some principle of priority. Only the most urgent needs of reconstruction or the most immediately remunerative enterprises can be financed.[17]

As conditions to these private loans, guarantees must be provided that the money will not be spent for military purposes but for productive uses, that new money will have priority over reparations claims or other obligations. The indemnity must be fixed within the capacity of Germany to pay, otherwise Germany is a poor business risk, thinks Professor Cassel. Finally, the proposal to discount the indemnity bonds he believes to be vicious, for it would make the investor of new money a partner in collecting a questionable claim. If the indemnity-paying powers are bankrupt their name does not strengthen an obligation. No lender would voluntarily undertake to be the partner or executor of a bankrupt.

(b) *Proposal of Lehner*—

A strong defense of the private loan as against the government loan was made by Herr A. Lehner, of Germany.[18] During the war state control and nationalization were extensively applied, and as a result the post-war problems were approached in the hope of state help. International loans are necessary only to defer payments for the excess of imports. The furnishing of adequate guarantees is the basic principle of Lehner's proposal. Using the analogy of coöperative credit among small artisans, who are able jointly to obtain credit beyond the attainments of the individual, Lehner advocated the formation of a *Giro-Zentral-Bank,* a coöperative clearing bank, supported by manufacturers, traders and banks in both lending and borrowing countries. The security of this coöperative credit society would be not merely the capital of the

[17] International Financial Conference, Paper XIII (3), pp. 42–45.
[18] International Financial Conference, Paper XII (10), A Proposal for the Solution of the Exchange Problem, pp. 70–77.

banks but the credit behind the bank, namely the raw material of the industries, the stock of finished goods and the real estate. The excess of imports would be temporarily funded by a loan in the exporting country which would be secured by the capital of the proposed clearing banks of the lending country, by debentures covered by the collateral of the exporters of raw materials, the capital of the German central clearing bank, and the entire assets of the coöperating commercial and industrial interests supporting the German central clearing bank.

D. The Ter-Meulen-Bruins Plan

One of the most important practical results of the Brussels Financial Conference was the perfecting of the Ter-Meulen scheme for the granting of private credits according to the usual trade practice, but backed by unquestionable security. The Ter-Meulen plan, in a tentative form, was included as part of the resolutions unanimously adopted by the Conference, and in the final form was approved by the Provisional Economic and Financial Committee of the League of Nations.

i. *Bruins' Outline*

The theoretical basis of the Ter-Meulen scheme was presented by Dr. G. W. J. Bruins in a paper prepared before the date of the Conference.[19]

(a) *Criticism*—

Bruins pointed out the weakness inherent in the proposals for large international loans, and for government loans of any size. A powerful international organization would have to be established to handle inter-government loans. The raising of funds by lending governments would increase inflation. If the United States did not join in further inflating the currency, the depreciation of foreign currencies in terms of the dollar would continue. Again, the international authority would have the task of ascertaining in which cases and in which forms credits should be granted. Extensive investigation would be necessary, decision would rest

[19] International Financial Conference, Paper XIII (2), pp. 16–24.

in the hands of government officials, and the approval of an international authority would be required for the basis and priority of distribution between the applicant countries, as well as for the specific guarantees to be required. An elaborate organization, a large staff, expensive maintenance and bureaucratic delays would render international loans of doubtful feasibility.

(b) *The Conditions of Loans*—

As a fundamental condition for any loan, Dr. Bruins, like the other economists of the Conference, insisted that the borrowing countries check inflation, and restore order in their currency and exchange. Again, reconstruction credits must have priority over outstanding international obligations. It is a general principle of law that claims arising out of assistance to an insolvent and enabling him to restore his solvency, have a priority over obligations previously incurred. The indemnity must be fixed within the capacity of Germany to pay and the assets already pledged for the obligations due under the peace treaty must be modified. Credits must be limited to productive purposes, and must be given on a commercial basis.

(c) *Private Credits*—

Of the several forms of private credit which would be available, Bruins mentions "finishing credits," but points out their limitations. If the interval between the receipt of the raw material in the impoverished country and the return of the finished goods is brief, there is no large risk, particularly because the cost of production in those countries is under the international level. Finishing credits are capable of wider extension if coöperative groups of borrowers organize and enjoy banking support. But even at best refining credit cannot be adequate in scope to the needs of international trade. For since the end of the war Europe has suffered from under-consumption and the countries of supply of raw materials have been glutted by overproduction. The cycle of international trade is at a "deadpoint." An impetus is necessary to initiate the international movement of goods. Europe cannot immediately pay in goods and must therefore have credit, in order that it may be able to pay later. During the two years after the signing of the armistice, the problem was ever present, but the emphasis was shifted. In 1919 buyers urged international

credits, but sellers were busy filling the demands deferred during the war. In 1920 and 1921 the sellers who were choked with their redundant supplies sought credit to move their goods.

(d) *Bruins' Plan*—

Any plan of private credits must insure that the guarantees are adequate to cover the extraordinary risks. According to one proposal the individual buyer or borrower would be replaced by an organization covering the whole trade or industry, all the members of which would be jointly liable. This organization could at the same time effect the distribution of imported materials among its constituent plants. Prior liens in favor of the new credits and special trustee institutions to protect the title of the foreign exporter in the goods would be necessary. However, Bruins points out that even if the government assumed an additional liability as guarantor, yet the general risks, political and otherwise, would affect the government of the borrowers and involve their specific guarantees. Guarantees free from this difficulty would be property or assets outside the borrowing country, such as customs duties, although these too would be somewhat subject to the above risks.

In the extension of credit, private enterprise would have to be unrestricted. Yet some international supervision would be indispensable, for the very pledge of government assets or revenue would imply that there was to be a trustee, necessarily an international authority, to guard the rights of both lenders and borrowers and at the same time to avoid preëmpting certain sources of income in favor of particular creditors. Under a scheme of unrestricted private enterprise, the relative profitableness of the several propositions for which credit is sought would effect an automatic distribution of the funds, so that the most pressing needs would receive priority. Nevertheless, the approval of an international authority would be necessary to determine the relative importance of competing applications for credit. Again, credits would have to be granted on a commercial basis so as to avoid further inflation. In general outlines, the problem of method would resolve itself into the mobilization of credits. In the lending countries organizations of producers would issue bonds to the public or else the international authority might approve bonds to be issued against national credits, under the guarantees deposited with it. In brief, the principle of such a plan of international

coöperation is to put adequate guarantees into the hands of an international authority, whose approval of international credits would be necessary, and at the same time to leave the arrangement of credits to the private borrowers and lenders. Of course, the strength of the system lies in its strictly commercial character. Therefore non-remunerative and yet necessary enterprises, such as restoring transport and communication, would be neglected. However, for such general reconstruction purposes some supplementary form of credits would have to be provided.

ii. *The Ter-Meulen Plan*

(a) *Summary and Text*—

A tentative draft of the Ter-Meulen plan was submitted as an appendix to the unanimously adopted resolutions of the Committee on International Credits of the Brussels Financial Conference. After slight amendments a final text was drafted. The underlying idea of the Ter-Meulen plan is that the various governments shall specify which assets, based on assured revenue, they are ready to pledge, that an international authority shall determine the gold value of the assigned assets, and that the government shall then issue bonds up to this amount, which it shall lend to its nationals. The importer who borrowed these bonds for collateral would nevertheless be free to arrange any terms of credit with the foreign exporter. The terms of the private credit would not need to correspond, however, with the government bonds themselves either as to rate of interest or maturity. Loans would be made for productive purposes only and their character as essential and preferably self-liquidating imports would have to be approved by the International Commission.

The government loans would be used only as collateral. Then if the private credit was paid, the bonds would be returned to the issuing government. If the credit was not paid, the issuing government would have the right to pay it instead, withdraw its bonds and look to its national for reimbursement. If it failed to pay the matured credit the exporter might hold the government bonds to maturity or sell them, deduct his claim against the private importer, and return the balance to the issuing government. The exporter would rarely have to sell the bonds of the government of the

importer, because the relation between the yield of the pledged revenues and the total bonds outstanding at any time would permit the redemption within a few months of all the bonds then outstanding. Even if importers should default in such large numbers that the government could not redeem at maturity all the bonds then outstanding, the pledged revenues would serve as collateral for a new loan, the proceeds of which could be used to refund the balance of the then outstanding bonds.

In view of the fact that the proportions of the private borrowings in the several countries would be changing continually, and since the pledged revenues would be devoted to a sinking fund, the International Commission would have to buy and sell exchange on a large scale. Since the pledged revenues would be in gold and the bonds would perhaps be in paper currency, there would have to be a large margin to guard against the depreciation of exchange. Again, the revenues assigned to the International Commission might be larger than the sums needed for payment of interest, sinking fund, and redemption of collateral on private credits in default. In other words, the government of the borrowing nationals would be temporarily deprived of a portion of its budget revenue. The immobilization of part of the government revenue would increase in proportion with the credits to be secured.

To avoid the invasion of the rights of any government provisions are made to safeguard the sovereign rights of the governments involved. The text follows:

1. In order that impoverished nations, which under present circumstances are unable to obtain accommodations on reasonable terms in the open market, may be able to command the confidence necessary to attract funds for the financing of their essential imports, an International Commission shall be constiuted under the auspices of the League of Nations.

2. The Commission shall consist of bankers and business men of international repute, appointed by the Council of the League of Nations, and shall have discretion to appoint agents and sub-commissions and to devolve upon them the exercise of its functions.

3. The governments of countries desiring to participate shall notify the Commission what specific assets they are prepared to assign as security for commercial credits to be granted by the nationals of exporting countries.

4. The Commission after examination of these assets, shall determine the gold value of the credits which it would approve against the security of these assets.

5. The participating governments shall then be authorized to

issue bonds to the gold value approved by the Commission. The bonds shall be in such form, with such date of maturity and rate of interest, as the Commission may decide and shall, in particular, enumerate the assets pledged against the bonds. The denomination of each bond and the specific currency in which it is to be issued shall be determined by the participating government in agreement with the Commission, in accordance with the conditions applicable to the particular transactions in respect of which they are issued.

6. The service of these bonds, which will be obligations of the issuing government, shall be specifically secured out of the revenue of the assigned assets.

7. The assigned assets shall be administered by the participating government or by the International Commission as a majority of the Council of the League of Nations may determine on the proposal of the International Commission. Nevertheless, in cases where the administration of the assigned assets is in the hands of the participating government, the International Commission at any time may, and in the event of default shall, require the participating government to transfer the administration of the assets to itself.

The participating government shall have the right to appeal to the Council of the League of Nations against this requirement, and the decision of the Council of the League of Nations on these questions shall be binding.[30]

8. The revenues from the assigned assets shall be applied as follows to the service of the bonds:

(1) Out of these revenues the Commission shall purchase and hold, or the participating government shall satisfy the Commission that it has purchased and holds, foreign currencies sufficient to provide—

(a) Cover for the coupons falling due in the next year of all bonds at any time outstanding in each of such currencies.

(b) A sinking fund calculated to redeem at maturity 10 per cent of the bonds outstanding in each of the different countries.

(c) A reserve in such foreign currency or currencies as the International Commission may determine for the redemption of any bonds sold in accordance with paragraph 16.

[30] On this section (No. 7), the Provisional Economic and Financial Committee on the Council of the League of Nations made the following comment:

This article contemplates that in certain eventualities the Council shall take responsibility with regard to the transfer of the administration of the assigned assets from the participating governments to the International Commission.

Countries exposed by the weakness of their credit to onerous conditions and exacting demands, will thus secure an impartial tribunal to protect them. They will find in it a support when dealing with their creditors and being relieved of any fear of unfair political pressure they could readily accept methods of administration which would not, as in the case of certain "Debt Councils," threaten an encroachment on their sovereign rights; these sovereign rights would remain under the protection of the Council of the League of Nations. Being thus able, without misgivings, to offer to lenders adequate guarantees they should be in a position to borrow on more reasonable terms than would otherwise be the case.

There are many details of administration on which we have not felt competent to lay down definite proposals for procedure and these remaining questions must be dealt with by the officials ultimately appointed to carry out the scheme.

The question has arisen at many points of our discussion how far the League, by setting up the International Commission, contemplated in the scheme, would be considered to involve itself in any financial or other guarantee against losses by the parties concerned.

We recognize that the Council, if it adopts the plan, will be under a moral obligation to provide such reasonable safeguards as are in its power, but we think that it should be made quite clear both on the bonds themselves and otherwise that in setting up the machinery contemplated under the scheme, the League in no way commits itself to any *financial* or *administrative* guarantees and assumes no liability whatever in respect of any losses which may occur.

(11) Any surplus remaining after the provision of these services shall be at the free disposal of the participating government.

9. The participating government will be free either to pledge its own bonds as collateral for credits for *approved* imports on its own account or to lend the bonds to its nationals as collateral for credits for *approved* imports on private account, and for the latter purpose will be free to fix such terms including the security, if any, to be given, as it may think fit.

These terms shall be communicated to the Commission. The bonds shall not be used for any other purposes than those specified in this clause.[21]

10. Each bond shall before issue be countersigned by the Commission in proof of registration.

11. The fundamental purpose of the scheme being to facilitate and expedite the import of raw materials and primary necessaries as well as enable the borrowing countries to reëstablish production *especially for export,* bonds secured on the assigned assets shall not be utilized as collateral for credits for the import of other commodities, provided that where the Commission is satisfied that the import of such other commodities will assist in securing the above purpose, it shall have the discretion to permit special exceptions to the above rule subject to such conditions as it may think fit.

12. For each borrowing country the Commission will draw up, in consultation with the participating government, a schedule of approved imports which will be regarded as falling within the definition of raw materials and primary necessaries.

13. Particulars of each transaction must be registered with the Commission, which, before countersigning a registered bond, will satisfy itself that the credit is for an *approved* import and that the period for which it is proposed to be granted is a reasonable one.

14. The same conditions as govern the pledge of its bonds as collateral for credits for imports on private account shall apply in cases where the participating government pledges its own bonds as collateral for imports on government account.

15. After having received bonds duly countersigned, the importer will pledge them with the exporter.

16. Pledged bonds shall be dealt with as follows:

(a) In the absence of any failure by the importer to fulfil his contract with the exporter, the coupons on their due date, and the bonds as they are released shall be returned to the importer who shall return them to his government forthwith.

(b) In the event of the importer not fulfilling the terms of his contract, the exporter (or his assigns) may either hold the bonds

[21] The tentative draft as originally presented amplified this section, as follows:
After the preparation of these bonds the participating government shall have the right to loan the bonds to its own nationals, for use by them as collateral security for importations.
The participating government shall be free to take or not to take security for the loan of these bonds from the nationals to whom they are lent.
The maturity and the rate of interest of the loan of the bonds shall be fixed by agreement between the participating government and the borrower of the bonds; they need not be the same as the maturity and the rate of interest of the bonds themselves.
When making application to his government for a loan of these bonds, the importer must furnish proof that he has previously obtained from the International Commission express permission to enter into the transaction for which the bonds are to be given as collateral.
Having obtained the consent of the Commission and received from them the countersigned bonds, the importer will pledge these bonds to the exporter in a foreign country for the period of the transaction.

until maturity, or if he prefers he may, at any time, sell them in accordance with the laws and customs of his country, providing that before the bonds are sold a reasonable opportunity shall be given to the issuing government to repurchase them by paying to the exporter the amount of his claim. The proceeds of such sale shall be applied by the exporter towards covering his claims against the importer. Any surplus not required for this purpose shall be accounted for by the exporter to the participating government.

(c) Any coupons or bonds returned to the participating government or purchased by such government shall be forthwith canceled in accordance with the regulations to be prescribed by the International Commission; canceled bonds may subsequently with the approval of the Commission be replaced by other bonds either in the same or in a different currency, in accordance with the conditions governing the original issue of bonds.

(b) *Recommendations*—

The Economic and Financial Committee of the Council of the League of Nations strongly recommended a test of the Ter-Meulen plan, because it alone held out a fair promise of success in meeting the acute international credit situation. Yet haste was to be avoided and the scheme slowly developed. A business man was to act as Organizer of International Credits; his prime task would be to determine the extent to which the Ter-Meulen scheme could be linked with the existing services in the several countries, and to find out to what extent the borrowing countries would be willing to avail themselves of this plan. Until this investigation should warrant the creation of a large organization, the organizer himself would temporarily assume the duties of the contemplated international commission.

Sir Drummond Fraser, the author of the plan of continuous issue of war bonds (or the so-called Drummond Fraser Plan of day-to-day borrowing) was appointed organizer of the Ter-Meulen plan of international credits.[22]

(c) *Limitations of the Scheme*—

As Dr. Bruins pointed out the Ter-Meulen plan does not provide for necessary public works, which are essential for the conduct of private enterprise but which nevertheless are not so remunerative. Furthermore, the Ter-Meulen plan provides no help for states such as France or Italy, which are not so lacking in credit as to submit to the administration of their assets or revenues

[22] London dispatch, Mar. 8, 1921.

or for states such as Poland which are poor enough but may be too proud to do so. Again, some states have no assets available, either because of poverty or through the priority of reparation claims. For the former class, the existing limited mechanism of international credit would have to suffice, in spite of its limitations. For the latter, some assistance might be provided under the international relief credits organization. Nevertheless, in a large range of operations the Ter-Meulen scheme should work, for the limitation of credit to productive enterprise and the guarantee by the self-liquidating obligations of the government of the importer would undoubtedly induce exporters to grant credit in cases where they would hesitate to lend on the credit of the private borrower only. Of course, if the government of the borrowers did not enter into the transaction in good faith, it would require international coercion to effect a just settlement. However, only a test will afford basis for a sound judgment of the scheme.[23]

(d) *An Appraisal of the Ter-Meulen Plan*—

The Ter-Meulen scheme is not pretentious. It is modest in its purpose and narrow in its scope. It does not aim to stabilize the exchanges nor does it contemplate discounting the indemnities. It does not involve huge sums nor does it attempt immediately to remedy all the ills of Europe. It depends primarily upon existing facilities of international credit. Even in requiring the guarantee of the government of the borrower, the Ter-Meulen plan does not call for the pledging of a large part of the national assets or revenues. These are furnished only to an extent sufficient to cover approved private loans. As a result the lenders do not have to raise large sums in excess of the capacity to save of the investors in their country, nor do the borrowing governments suddenly obtain huge sums of money which they are likely to misuse.

The Ter-Meulen scheme provides guarantees which will inspire the exporter with confidence, yet it does not release him from the necessity of inspecting his credit risks carefully.

[23] London Economist, Oct. 23, 1920.

CHAPTER XX

NEW YORK AND LONDON AS FINANCIAL CENTERS

During the days of the Italian republics and the overland route to Asia, Venice was the center of the business world. The discovery of America made the Mediterranean routes of minor importance and conferred financial preëminence upon Spain. During the era of colonial expansion Holland for a time occupied a dominant position in the commercial and financial world. As a result of the Napoleonic Wars England wrested the financial supremacy from France. The World War has affected the relative positions of New York and London. The extent of this change is the subject of this chapter.

A. Before the War

i. *Geographical Position*

The financial supremacy of London in international finance was based on many factors. Great Britain, completely surrounded by water and situated off the most densely populated continent of the world, is destined by nature to be a seafaring and trading nation preëminently. Geographically London occupies the position that Venice and Constantinople did in former commercial eras. It is a focus of trade routes of the world. On the other hand, New York lies remote from many lanes of trade. London is the gateway to Europe and Asia, whereas New York at best can be the commercial center for the Americas only. This fundamental fact has not been greatly altered by the war.

Relative Population of the Continents [1]

	Area (thousand square miles)	Population (in millions)	Population per square mile
Europe	3,873	464.7	120.0
Asia	17,206	872.5	50.7
Africa	11,622	142.8	12.3
North America	8,589	140.0	16.3
South America	7,570	56.3	7.4

[1] National Geographical Society.

The population of Europe is more than three times that of North America and the population of Europe and Asia combined is more than six times that of the Americas. Apparently so long as the relative populations of the continents do not greatly change conditions favor the continuation of London as the world's leading trade center.

A comparison of the distances from London and from New York to important overseas points shows the greater proximity of London.

To Port of	From London,* Miles	From New York,† Miles
Odessa	3,410	5,370
Port Said	3,248	5,122
Natal	6,810	6,815
Bombay	6,330	8,12c (via Suez) 11,250 (via Cape of Good Hope
Gibraltar	1,325	3,207
Calcutta	7,795	9,830
Hong Kong	9,900	11,430 (via Panama) 11,610 (via Suez)
Yokohama	11,245	9,243 (via Honolulu)
Manila	9,750	11,546
Melbourne	11,250	12,880 (via Cape Horn) 12,670 (via Cape of Good Hope) 10,028 (via Panama)
Pernambuco	4,130	3,696
Buenos Aires	6,280	5,868
Valparaiso	8,870	4,637 (via Panama) 8,460 (via Cape Horn)
Havana	4,100	1,227

* Shipping World Year Book.
† Statistical Abstract, Navy Department records.

The comparison of the shipping distances indicates that London is much closer to the densely populated sections of the world. Even in distance from the east coast of South America and from Australia London is not at a great disadvantage compared to New York. New York has the advantage of proximity only in trade with Central America, and the west coast of South America, via Panama.

ii. *Industrial Maturity*

Great Britain has attained industrial maturity whereas the United States has not. Great Britain imports food and raw

material and exports manufactured goods. It is highly industrialized. The United States still is partly in the agricultural stage, both because of the relative sparsity of population and because of the incomplete development of her natural resources. As a result of her industrial maturity Great Britain has adopted a policy of free trade. In the absence of a tariff there are no restrictions and impediments on the movement of foreign merchandise. London is the greatest market for consigned merchandise in the world. In London every commodity in the world, practically, may be bought and sold. The heavy coal exports make possible the imports of bulky raw materials. The routes of liners and tramp steamers radiate from London to every corner of the globe. Because of Great Britain's industrial maturity the rate of return on domestic investments has been low, and British funds have therefore been invested abroad to take advantage of the higher rates. As a result of the industrial saturation of Great Britain the funds of her nationals have been invested in practically every country, and these investments have often taken the form of the exportation of British capital goods, such as rails, structural steel, and transportation and industrial equipment. Further, as a result of her industrial maturity she has not been able to direct the annual increase of her population to the further development of her resources but has had to export it. The peopling of the British Dominions with stock from the British Isles has created an overseas demand for British merchandise, and out of the surplus population trained men have been recruited for foreign trade and the commercial and diplomatic services.

iii. *Transshipment Trade*

An important element in the financial primacy of London is the huge volume of British foreign trade. The total trade of the United Kingdom during 1913 amounted to $6331 million while that of the United States was only $4276 million. British trade was not only larger in amount but involved more foreign countries than did that of the United States. As a result almost every country in the world had to make sterling remittances to pay for British exports. Therefore sterling bills had a wider market than any others. In fact, British bills were used in the settlement of trade balances between non-British countries, as between the

United States and China. Fully half the amount of sterling bills that came to London represented the financing of non-British trade.[2] However, even before the war the federalization of trade and finance was gradually taking place. Half a century ago settlements between New York and Bremen were made in British exchange.[3] But as the function of London as the international jobber diminished and direct trade between the developing non-British countries increased the financing of trade was accomplished in growing measure independently of Great Britain.

The importance of London as a center of trade and transshipment has been due largely to the service of the British merchant marine. In 1914 British steam tonnage was 41.7 per cent of the world's total. The merchant marine has been reinforced by the most powerful navy in the world, and by the possession of harbors and coal and oil fueling stations at the strategic trade positions throughout the world.

iv. *Financial Facilities*

As a result of the geographical, industrial and commercial factors Great Britain has developed financial facilities for handling the world's trade. For this service she has enjoyed a great initial advantage in that the British Empire produces over 60 per cent of the world's gold.

GOLD PRODUCTION OF THE WORLD[4]

Year	Transvaal. Per cent	British Empire. Per cent	World production. Million dollars
1913	39.5	60.2	460
1919	47.3	66.0	365

The possession of the source of supply of the major part of the world's gold production has made it possible to maintain a free gold market in London, and to keep sterling at mint parity. Thus

[2] Wyse, Robert C., Future of London as the World's Money Market. The Economic Journal, December, 1918, p. 389.

[3] Goshen, Theory of the Foreign Exchanges, 16th Edition, 1894, p. 34. Lawson, W. R., British Economics in 1904, p. 226. Conant, C. A., History of Modern Banks of Issue, p. 136, 5th Edition.

[4] Statesman's Year Book, 1920.

the world has had an international currency which was unfluctuating, freely convertible into gold, and acceptable everywhere. Therefore foreign countries have stated their prices in sterling and have drawn on London. Even in trade between non-British countries the British acceptor has furnished the media of payment. Tea shipped from China to New York would be paid for by drafts of the exporter on a London bank against the account of the American importer. The Chinese exporter would receive the price which his bill commanded in London and the London acceptor would turn to the New York importer for payment.[5]

For the handling of trade and finance, London possesses unrivalled facilities, including the British banks and banking houses, the Anglo-foreign banks, the insurance companies, and the London Stock Exchange, on which are listed securities from almost every quarter of the globe. The British Stock Exchange list resembles a geography index. Loans to countries, cities, railroads, utilities and industries are made in overseas countries and on all the continents.

The financial machinery of London consists of acceptance houses, discount houses, bill brokers, joint-stock banks, and the Bank of England. Before the war, the Bank of England maintained its machinery and kept sterling near mint parity by changes in the discount rate. The existence of a broad and international market for long and short-term investments and of a flexible discount rate enabled London to maintain financial supremacy. The extent and steadiness of the London money market made it the world's reservoir of credit.

v. *Political and Other Factors*

Not the least element in the financial primacy of London is its position as the capital of the greatest empire of the world. The financing of British and colonial trade alone would make London the most important financial city. Added to this fact is the international outlook of the British merchant, banker, and government official. The British business mind is cosmopolitan. Having fully developed "the tight little isle," it looks toward the sea and the

[5] Goshen, p. 30, *et seq.*

distant lands. It thinks in terms of continents. This international-mindedness is evident in the facility with which both British capital and British man power move from one foreign country to another. The British mind is primarily the mind of the trader and the developer of natural resources and it has an orientation that cuts across political boundaries. Finally, Great Britain has the advantage of being the pioneer in the field of international trade and finance. As a result trade lanes have been established, financial methods have become fixed, and the minds of the traders of the world have become accustomed to a regime in which London is the dominating factor. The City has maintained this position because of a liberal fiscal policy, an adaptable banking system, and the unsullied reputation of British merchants and financiers for honesty and faith-keeping.

B. During the War [6]

The events of the war indicated that London was apparently losing this traditional position. With respect to the British merchant marine, the jobbing trade, and financial power, the economic conditions created by the war seemed unfavorable to the continued maintenance, unchallenged, of the preëminence of London.

i. *The Decline of the Jobbing Trade*

The operation of the submarine in the Mediterranean shifted the trade route to the Orient, from the Mediterranean to the Pacific. North and South America traded directly with overseas countries. The Panama Canal permitted a juncture between the Asiatic ports and the American Atlantic coastal cities. The shortage of shipping compelled the most efficient routing, which frequently was not via Europe.[7] Tin from the Straits came to American ports directly instead of via London. Tobacco from Sumatra was imported directly by the United States instead via Rotterdam. Tea was routed across the Pacific to America instead

[6] Lansburgh, Alfred, Die Ausschaltung London's als Clearinghaus der Welt. Die Bank, October, 1914, pp. 903–920.

[7] See the author's International Commerce and Reconstruction, pp. 74-76, and p. 158.

of via Europe. The decline of the jobbing trade of Great Britain is strikingly indicated in the following table:

EXPORT OF FOREIGN AND COLONIAL MERCHANDISE

Year	Value in millions sterling
1913	109.6
1914	95.5
1915	99.1
1915	97.6
1917	69.7
1918	31.0

In the year 1918 the transshipment trade of Great Britain declined to 28 per cent of the pre-war figure. To some it seemed that London had resigned the function of international jobber.

ii. *The Decline in Shipping*

According to Lloyd's Register, the decline of the steam tonnage of the United Kingdom from June, 1914, to June, 1920, was 5,497,000 tons. On the other hand, the steam tonnage of the United States increased 10,379,000 and the net increase of the entire world amounted to 8,501,000. Of the seagoing steam tonnage afloat in 1914, 43.9 per cent belonged to Great Britain and 4.7 per cent to the United States, and in 1920, 35.1 per cent belonged to Great Britain and 24.0 per cent to the United States.[9] During the war the rise in prestige of non-British shipping at the expense of the British seemed to indicate a decline in the focal position of London in international trade.

iii. *Foreign Exchange Arbitrage*

As was explained in the section on foreign exchange in the United States, there was a great increase during the war in dealings between the United States and other countries. Before the war American dealers conducted arbitrage operations with only the three leading commercial countries of Europe, but during the war with practically every country of the world. Furthermore,

[9] London Economist, July 31, 1920, p. 183. Also Lloyd's Register, and the Bureau Veritas Repertoire Générale.

the dollar accounts of foreign banking institutions in the United States increased in activity greatly, representing transactions with Asia, the Americas, and the neutral European countries.

However, the importance of the pound sterling was statistically indicated during the war. Of the total arbitrage operations Great Britain figured as the most important country. During the entire period of the regulation of foreign exchange from February 20, 1918, to June 25, 1919, the total purchases and sales of demand and cable exchange between "dealers" in the United States were $9981 million, of which $6883 million, or about 69 per cent, covered exchange on Great Britain. Of the total arbitrage operations of the United States during this period, Great Britain was involved in considerably over 50 per cent. Of the foreign exchange purchases of other countries by the United States, amounting to 1607 million, $905 million, or about 56 per cent, were in exchange on Great Britain. Of the foreign exchange sold to other countries by the United States, amounting to $1296 million, about $928 million or 72 per cent was in exchange on Great Britain. The importance of Great Britain in the purchase and sale of dollars for foreign account is also clearly indicated.

The importance of sterling is likewise evident in the purchase and sale of non-British currency by Great Britain. The extensive sale of Dutch guilders, Norwegian and Swedish kroner, Spanish pesetas, and Swiss francs by Great Britain, has been treated in the section on foreign exchange in the United States.[9]

In spite of the war it seems that the preëminence of Great Britain in foreign exchange operations was maintained:

iv. *The Federal Reserve System and the American Acceptance Market*

Since the establishment of the Federal Reserve System, just prior to the war, a market for acceptances has grown in the United States. The acceptances bought in the open market by the Federal Reserve banks rose from $65 million in 1915 to $2825 million in 1919, as follows:[10]

[9] Report of the Federal Reserve Board, 1918, pp. 53, 56; 1919, p. 47.
[10] Annual Report of the Federal Reserve Board, 1919, p. 21.

	Million dollars
1915	65
1916	386
1917	909
1917	1809
1919	2825

Similarly the trade acceptances discounted by the Federal Reserve banks increased from $37.7 million in 1917 to $187.4 million in 1918.[11]

An estimate of the acceptance liabilities of member banks on May 4, 1920, amounted to $678 million, and the amount of bankers' acceptances growing out of domestic and foreign trade transactions held by the Federal Reserve banks in June, 1920, amounted to $412 million.[12]

The growth of acceptances in the New York district likewise indicates progress. The outstanding acceptances of member banks in the New York district grew as follows:

	Million dollars
September, 1916.......	115.6
September, 1917.......	172.5
September, 1918.......	275.8
December, 1919.......	335.7

The total volume of bankers' acceptances and foreign trade bills in dollars drawn on American merchants at the end of 1919 was estimated at more than $1000 million.

The amount of the acceptances of foreign-trade banks and acceptance corporations in New York on December 31, 1919, was over $90 million, and the capital and surplus of these institutions amounted to almost $39 million.[13]

In comparison, the acceptances of groups of the leading banks of Europe, constituting a large part of the total acceptances out-

[11] Annual Report of the Federal Reserve Board, 1919, pp. 181-184.

[12] Federal Reserve Bulletin, July, 1920, p. 666.

[13] Annual Report of the Federal Reserve Bank of New York, 1919, p. 19.

standing in each country, are of interest. The acceptances of the 30 leading banks of Great Britain at the end of 1913, 1918, and 1919, amounted to $191 million, $302 million, and $772 million, respectively. The acceptances of the three leading banks of France outstanding at the end of 1913 were $98 million and of the eight leading banks of Germany at the same date, $319 million.[14] The growth of acceptances in the United States has been hindered by the absorption of short-time funds to treasury certificates of indebtedness, and by the demands of the stock market. The introduction of term settlements such as is customary on the stock exchanges in Europe,[15] may reduce the stock-market demands for call funds, and thus permit the development of an acceptance market. The ultimate retirement of the government floating debt will likewise release large amounts of liquid funds which will be available for investment in acceptances.

v. *The Depreciation of Sterling*

The suspension of specie payment at the beginning of the war, the restriction on gold shipments from London, and other factors, discussed elsewhere in this book, resulted in a depreciation of sterling. A depreciated rate is necessarily unstable. As a result of the war London has for the time being lost the supreme advantage of an unfluctuating standard, which was suitable as an international medium of settlement of foreign-trade transactions. Discount rates were effective before the war in regulating the gold flow and in maintaining the stability of sterling. An attempt was made during the war to attract foreign funds by granting a preferential rate of interest on foreign balances.[16] However, when the fluctuations in exchange are wide and violent, a fractional rise in the rate of interest does not compensate for the risks of great losses. Therefore the device was not effective and was abandoned. Before the war London's discount rate acted like the governor of a steam engine, and automatically and accurately adjusted the exchange rates. Temporarily at least London has resigned her

[14] Federal Reserve Bulletin, April, 1920, p. 374. See also estimates by Leopold Frederick of acceptances outstanding in London and New York. *ibid.*, January, 1919, pp. 21-22.

[15] Suggested by Mr. Paul M. Warburg in a statement to the American Acceptance Council.

[16] For a discussion of this subject see the chapter on the British Foreign Exchange.

financial supremacy as the controller and regulator of gold movements and international exchanges.

vi. *Other Financial Factors*

However, in some respects London still maintains the machinery necessary for the resumption of her pre-war position. It is true that as a result of the war the British investors liquidated a large part of their holdings of American securities. But because of the rather parochial character of the New York Stock Exchange list, they were unable to sell in New York the British holdings of many other than American securities. Great Britain still retains about $15,000 million of foreign investments. The British colonial securities were not even mobilized and of the non-British investments there still remain many South American and other neutral securities.

The reversal of America's financial position from that of a debtor to that of a creditor will tend to raise the financial prestige of New York, but will not react to the injury of London's preeminent position. Even if the Allied debt should not be paid in full, America will still be a creditor nation and will therefore have an annual invisible credit balance which it may offset by goods or by further foreign investments. To the extent that America builds up large holdings of foreign securities she will develop one of the prerequisites for becoming an important financial center. However, until the New York investment list becomes as inclusive as that of London, the international supremacy of London will not be seriously challenged.

C. After the War

With few exceptions, the factors which made London the banking center of the world again became operative after the war. The place of Germany was taken in part by the United States. London is still the focus of the trade routes of the world, and still the gateway to the most densely populated of the continents.

i. *The Restoration of Commercial Prestige*

Although the war hastened the industrialization of countries, which were cut off from Europe, the source of supply of finished

goods, yet the European countries, and England particularly, will continue for a long time to furnish manufactures to the undeveloped countries, the source of supply of raw materials. The function of London as a transshipping center was again in evidence during 1919 and 1920. The value of the exports of foreign and colonial merchandise in 1920 was more than twice that of 1913, and more than seven times that of 1918.

	Millions sterling
1913	109.6
1918	31.0
1919	164.7
1920	222.4

The comparison between the returns for 1918 and 1920 shows the rebound from war conditions. The comparison with 1913 must take into account the inflation of prices.

Not only did the transshipment trade of Great Britain greatly increase after the war, but the exports of home production likewise increased. The exports of British goods in 1913 amounted to 525 millions sterling and in 1920 to 1336 millions. The imports in 1913 amounted to 769 millions sterling and in 1920 to 1937 millions. The great increase in trade in both domestic and foreign goods was due to the dependence of Europe upon Great Britain, owing to the strength of British credit and the weakness of the credit of the Continental countries. Furthermore, foreign trade is more essential to the industrial life of Great Britain than to that of the United States, and the British have made vigorous efforts to retrieve their pre-war position.

Although the United States has greatly increased her shipping tonnage and the capacity of her shipyards, yet there is serious question whether she will be able to maintain an independent shipbuilding industry and a merchant marine competitive with those of Great Britain. The seafaring bent, an adequate trained personnel, incidental facilities, and commercial tradition are but a few of the factors which will help to restore British preëminence in the shipping world. By dint of the recently effected combination of American capital and German experience, the American merchant marine may attain a position somewhat analogous to that held by Germany before the war.

ii. *Restoration of Financial Prestige*

Among the difficulties in the way of the reëstablishment of the supremacy of London are the depreciation of sterling, the existence of a gold embargo, and the absence of a free gold market. On the other hand, New York is the only large free gold market of the world and the dollar is not depreciated in any important financial center. As a result the quotations governing the silver markets of the world are now established also in New York rather than in London alone, as before the war. The London quotation for silver fluctuates in sympathy with the exchange rate of the dollar in London.[17]

Nevertheless, London has not abdicated its financial position. With respect to most of the European countries the pound sterling is at a premium and fairly constant. After the war London became the banker for the Continent. British merchants purchased goods from the United States on short-term credit and sold to Continental merchants on long-term credit. London bought up the supply of franc, lira and other exchanges in the United States and furnished the Continental countries with dollars. Therefore, there is no wide market for the Continental exchanges in New York. On the other hand, the sterling rate has been artificially depressed in much the same way that the dollar was depressed during the war as a result of the "pegging" of the European exchanges. London not only exported goods to the Continent, but it also made loans, or invested in Continental properties, and bought up Continental holdings of neutral securities. These factors tended at the time to depreciate sterling.

The preëminent position of London has been further reinforced. In anticipation of enlarged demands for British credit, the banks of London amalgamated on a large scale and strengthened their organizations.[18] In addtion to furnishing short-term credit and strengthening her facilities with this end in view, Great Britain remained a large market for the flotation of international securities. By contrast, except for the listing of Cuban, Mexican and

[17] Report of Consul General George E. Anderson, Hongkong, March 2, 1920. Annual Review of the Hongkong and Shanghai Banking Corporation, Feb. 28, 1920.

[18] Commerce Reports, Dec. 29, 1917; Feb. 1, Mar. 2, Apr. 1, June 25 and Aug. 9, 1918.

a few other Latin American securities, the New York market has not the international character possessed by the London Stock Exchange. As an example of the efforts of the London bankers to retain their financial prestige, the British government undertook to pay the Argentine loan maturing in New York on May 15, 1920, and borrowed funds in the United States for this purpose. The New York bankers refused to renew the loan because Argentina at the time was drawing gold from the United States in settlement of her excess of exports.

London remains the international financial center because Great Britain still has about $15,000 million of foreign investments distributed in all parts of the world. True, as was shown above, in the section on British foreign exchange, the restriction of capital issues during the war, the prohibition on the exportation of capital, and the domestic requirements for capital for undertakings deferred during the war, caused a decrease relatively in the issue of foreign securities and an increase in the issue of home investments. The lack of capital in England may for some time reduce the flotation of overseas securities in the London market. For example, in the average of the three years from 1912 to 1914 about 20 per cent of the total British issues were for domestic purposes. But in 1920 the amount was 88 per cent.

But it is hardly likely that London will be supplanted as the world's market for the issue of international securities. The relatively high rate of interest paid on domestic investments in the United States, the lack of familiarity of the American investor with foreign securities and his preference for home investments, and the lack of colonies and of existing overseas investments are a few of the factors which will prevent New York from supplanting London as the world's investment center. Apparently, then, from the point of view of short-term as well as long-term credits, London will probably retain her pre-war financial supremacy.

D. The Outlook

There seems to be a little doubt in the minds of bankers and students of finance that New York will not replace London, but there is no doubt that New York will take an increasingly important part in international financial operations. The relations between these two financial centers will be characterized by a

closer coöperation, " a partnership of equals," as it was expressed by a prominent British banker.[19]

i. *Deficiencies of London*

Although London has not surrendered her financial supremacy, yet post-war London has not the same capacity as before the war to meet the world's needs. In order again to do so a credit balance of exports and imports, visible and invisible, must be obtained as a prerequisite for the restoration of a free gold market in London. Again, the position of London is conditioned by the pursuit of a liberal financial policy. Before the war the acceptances of non-British banks were discriminated against. If London is to continue to be the money market of the world, foreign banks should receive the same opportunity as domestic banks for the performance of legitimate banking functions.[20] Only by the maintenance of a free and fair market and by granting full opportunity to foreign banks will London be able to maintain her international position. In fact, instead of restricting the use of the sterling bill in trade between non-British countries, London bankers after the war will have to stimulate this business by the liberal treatment of the non-British bank in London.

ii. *Deficiencies of New York*

New York lacks the machinery and the personnel essential to become the world's banking center. Except in Latin America American banks establish foreign connections instead of their own branches. As a result, in spite of the fact that the dollar is the world's stable currency standard and that there is an increasing tendency all over the world to draw in dollars the facilities to make this possible are inadequate. Although Sir Edward Holden in his address to the stockholders of the London City and Midland Bank (September 14, 1918) advocated coöperation with foreign

[19] E. Mackay Edgar, London press, Aug. 25, 1919, and Edgar Crammond, *ibid.*

[20] Wyse, R. C., Future of London as the World's Money Market, Economic Journal, December, 1918, pp. 390–1.

bankers instead of the establishment of branches in competition with them, there is no doubt that the existing British banks all over the world constitute one of the very important reasons for the extensive use of sterling in international trade, even between non-British countries. The New York banks will have to establish adequate financial facilities in foreign countries if the dollar is to become a popular instrument in international trade.

Furthermore, New York must develop a market for international acceptances. The demand for short-time funds, for the government certificates of indebtedness, and for stock-exchange call loans has checked the growth of a market for foreign acceptances in New York. Both these obstacles should ultimately be removed. Again, New York lacks a wide market for foreign securities, particularly industrial securities, although as a result of the war this shortcoming has been partially overcome. True, most of the foreign securities floated in New York since 1914 are government rather than industrial loans. The few outstanding exceptions are the Royal Dutch, "Shell," De Beers, and Rand shares. The increasing familiarity with foreign securities upon the part of the American investor should make the New York Stock Exchange list as international as was that of London or Amsterdam before the war.

In personnel, New York has another great handicap compared with London or any of the European cities. There the dense population has compelled the exportation of surplus man power. Trained men returning from foreign parts to the banks of Europe have brought with them first-hand knowledge, which is essential for the financing of overseas business. Again, the presence of many nations in Europe on an area approximately equal to that of the United States has created an international outlook which is lacking in the United States. These deficiencies are not so easily overcome as the others. It will be many years before our population will be as dense as that of Europe and before the incentive to migration to foreign parts will be as compelling. Furthermore, the industrial immaturity of the United States and the existence of large undeveloped resources has retained the energy and capital of Americans within the country. The prevalence of high rates of interest at home is not an incentive to export capital. In short, the conditions that made London the world's commercial and financial center before the war were fundamental and not susceptible of being overturned during the war. For this reason New York

cannot attain at present to international financial leadership. Her functions will be to participate more extensively in international affairs and become one of the important foci in the world of finance.[21]

[21] Warburg, Paul M., Some Phases of Financial Reconstruction, Annals of Acad. Pol. Soc. Sci., vol. 82, pp. 347-373, March, 1919. The Nation's Business, January, 1919.

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